



## School of Dentistry and Oral Health



# Dental Clinical Manual

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**\*\*\*\*\*ADMINISTRATION\*\*\*\*\*****CHILD PROTECTION**

Griffith University is strongly committed to promoting and contributing to the safety, welfare and wellbeing of children and young people and preventing child abuse. The University will work collaboratively with other agencies to achieve this aim.

The Commission for Children and Young People and Child Guardian Act 2000 (Queensland) requires that paid employees, volunteers or trainee students if they propose to work in a regulated business whether the service or activity is for profit or not for profit to apply for and carry a Blue Card. Among regulated businesses, services or activities, is health. Therefore, Griffith University requires all individuals working within the Griffith University Dental Clinic to carry a Blue Card. Furthermore, Queensland Health requires all students or supervisors who undertake placements within its facilities to carry a Blue Card. The card should be carried on your person because regulated facilities can ask you to produce it at any time during your activities.

A blue card is a card issued by the Commission for Children and Young People and Child Guardian and indicates that a person is eligible to work with children and young people in Queensland. To determine a person's eligibility to hold a blue card, the Commission conducts a Working with Children Check. This is a detailed national check of a person's criminal history, including any charges or convictions, as well as any disciplinary information held by certain professional organisations and police investigation information into allegations of serious child-related sexual offences. A blue card remains current for two years and it is the individual's responsibility to renew it. For further information, including application forms and information on disqualifying offences, can be found at <http://www.bluecard.qld.gov.au>.

Griffith University considers it a professional responsibility to report to the Department of Child Safety any child you suspect is experiencing harm. The following are the telephone numbers for making such a report:

Business Hours: 1800 811 135

After hours and on weekends: 1800 177 135

Further information: <http://www.childsafety.qld.gov.au/>

Students should report any such matters to their supervisors and seek their assistance with reporting. All incidents of suspected harm to children and young people should also be reported to the Director of Clinical Operations.

## CLINICAL AUDIT

### Infection control – Prior to patient arrival

Checklist Item	Yes	No
<b>PPE</b>		
1. Appropriate hair (short hair or long hair tied back).		
2. Clean protective clothing.		
3. Closed toe footwear.		
4. Removal of jewellery, watches and bracelets and covering of open wounds with waterproof dressings.		
5. No food or drink in clinical area.		
<b>Hand washing</b>		
6. Appropriate sink used.		
7. Appropriate hand washing routine.		
8. Appropriate soap or antiseptic used.		
<b>Bay cleaning and Barrier Protection</b>		
9. Appropriate gloves selected.		
10. Water and air lines flushed for 2mins at start of day or 20-30secs between patients.		
11. Cleaned the following with disinfectant:		
a. Work surfaces		
b. Dental unit		
12. Produce bags used to cover:		
a. Assistant console		
b. Tray		
c. Keyboard		
13. Large bag used to cover:		
a. Bracket table body		
14. Barrier tape used to cover:		
a. Light handles and switch		
b. Numbers on keyboard		
c. Computer mouse		
15. Sterile drapes used for surgical procedures.		
<b>Zoning</b>		
16. Clean and contaminated zones clearly demarcated.		
17. Gloves removed before leaving bay.		
18. Gloves removed before touching patient records and radiographs.		

## Infection Control - During patient treatment

Checklist Item	Yes	No
<b>PPE – Operator and Assistant</b>		
19. Gloves appropriate to procedure (sterile or non-sterile) worn.		
20. Mask worn.		
21. Eye-wear providing suitable protection used		
<b>Patient protection</b>		
22. Updated Medical History obtained.		
23. Protective eye-wear worn by patient.		
24. Bib placed on patient.		
<b>Hand washing</b>		
25. Appropriate sink used.		
26. Appropriate hand washing routine.		
27. Appropriate soap or antiseptic used or alcohol hand rub.		
<b>Zoning</b>		
28. Clean and uncontaminated zones maintained.		
29. Sterile instruments, equipment, materials and medications maintained in clean zone.		
30. Contaminated instruments maintained in correct zone.		
31. Aseptic technique for item retrieval used.		
32. Single sheet pads used for material mixing.		
33. Gloves removed before touching patient records and radiographs.		
34. Gloves and mask removed before leaving bay.		
<b>Sharps management</b>		
35. Sharps not passed between individuals.		
36. Sharps dismantled and placed in appropriate container immediately on completion of use.		
37. Sharps containers are clearly marked, stable and out of reach of children.		
38. Needles re-sheathed using appropriate techniques (artery forceps or sheath holder).		
39. Contaminated needles not bent.		
40. Scalpel blades disposed of using appropriate technique.		
<b>Spillages</b>		
41. Surface cleaned immediately following spills or when visibly soiled.		
42. Appropriate spillages procedure implemented.		
<b>Radiography</b>		
43. Materials contacting intact skin should be cleaned between patients or barrier wrapped.		
44. Lead aprons remain clean through patient bib removal.		
45. Sealed barrier wrapped intra-oral film used where available or disinfection by immersion in household bleach for 30 secs.		
46. Exposure button protected by disposable plastic cover.		
47. X-rays viewed in clean area.		

Checklist Items	Yes	No
<b>Laboratory – clinical aspects</b>		
48. Impression materials mixed using a bowl and spatula cleaned with detergent and water.		
49. Minor chair-side adjustments performed over bin.		
50. Burs used for adjustments cleaned and sterilised after use.		



Checklist Item	Yes	No
<b>PPE – Operator and Assistant</b>		
51. Gloves and mask appropriately disposed of.		
52. Remove protective clothing prior to leaving clinical area.		
<b>Patient protection</b>		
53. Patient bib disposed of in clinical waste bin.		
54. Eye-wear cleaned using a mild detergent.		
<b>Hand washing</b>		
55. Appropriate sink used.		
56. Appropriate hand washing routine.		
57. Appropriate soap or antiseptic used.		
<b>Waste Management</b>		
58. Appropriate gloves selected.		
59. Waste discarded in appropriate “no-touch” bin with lid.		
60. Waste amalgam stored in labelled screw-top jar under radiographic fixer solution.		
<b>Bay cleaning</b>		
61. Appropriate gloves selected.		
62. Barrier protection systematically removed from clean zones first followed by dirty zones.		
63. Systematic cleaning of bay from least contaminated to most contaminated areas with neutral detergent, ensuring that all exposed surfaces are cleaned.		
64. Suction lines flushed through with recommended solution at end of each session or clean water in between patients.		
65. Suction lines that are not re-usable are disposed of.		
66. Air and water lines flushed for 20-30 secs between patients.		
67. If end of session, bay is put to rest position and switched off.		
<b>Instrument Cleaning</b>		
68. Appropriate gloves selected.		
69. Eye protection worn.		
70. Appropriate sink used for instrument cleaning.		
71. Recommended cleaning process implemented using detergent and water which may or may not be followed by ultrasonic cleaning.		
<b>Instrument Disinfection</b>		
72. Non-autoclavable items that have contacted the patient are completely submerged in disinfectant for appropriate time.		
73. Lifting forceps used to remove instruments from disinfectant and items rinsed.		
<b>Sterilisation</b>		
74. Appropriate method of sterilisation selected for equipment, e.g. wrapped for sterilisation or autoclaved.		
75. Autoclaves set to the recommended sterilising cycles.		
Checklist Items	Yes	No
<b>Tracking</b>		
76. Ensure that re-usable instruments used for recommended procedures are tracked and the batch control numbers recorded.		
<b>Storage</b>		
77. Instruments cooled and aired in a clean area prior to storage.		
78. Integrity of packaging material maintained whilst handling items or during storage and without external aids such as rubber bands or paper clips.		
79. Storage of sterilised items in a clean area.		
80. Sterilised packages that are wet or damaged are considered contaminated.		



## Infection Control - Laboratory

Checklist Item	Yes	No
<b>PPE</b>		
1. All personal belongings stored in lockers and lockers kept closed.		
2. General lab – hair, protective clothing, footwear and no food or drink.		
3. Casting room – section 1 + mask.		
4. Polishing area – section 1 + mask and protective eyewear.		
<b>Hand washing</b>		
5. Appropriate hand washing routine.		
6. Appropriate soap or antiseptic used.		
<b>Disinfection</b>		
7. Bites and try-ins cleaned and disinfected.		
<b>Polishing attachments</b>		
8. Separate polishing attachments kept for brand new items/appliances.		
9. Pumice not used for more than once appliance and discarded after use for items of patient work.		
10. Brushes cleaned and disinfected after use and where possible autoclaved.		
11. Polishing mops and brushes used for repair and reline cleaned after use.		
12. Appropriate lathe selected.		
<b>Return to clinic</b>		
13. Dentures disinfected before leaving laboratory for clinical area.		
14. Items transferred in sealed container or plastic bags with appropriate identification.		
<b>Commercial Lab</b>		
15. PPE – hair, protective clothing, footwear. Mask and protective eyewear as required.		
16. Hand washing – routine and appropriate materials used.		
17. Disinfection – impressions, bites and try-ins according to appropriate procedure.		
18. Polishing – see points 7-11.		
19. Return to clinic – items disinfected and sealed correctly.		
<b>Comments:</b>		

## **Risk audit**

Risk audits are regularly carried out on a course basis & submitted to Technical Services (Health). Health & Safety audits are carried out on an annual basis or more frequently if deemed necessary, risks identified and actioned.

Risk audits are also carried out on clinical areas & activities on an ongoing basis.

## CLINICAL REFERENCE GROUP

### Terms of Reference

#### Aim

To oversee the standards of clinical quality and patient safety in the Dental Clinic and ensures that all care provided is patient/family focussed, evidence based, holistic and of the highest standards. Further that the group considers the principles of population oral health, prevention and health promotion in making recommendations to the School Committee.

#### Objectives

1. Develop and monitor clinical guidelines, pathways, and policies.
2. Monitor and investigate clinical incidents and recommend risk mitigation strategies to prevent their reoccurrence.
3. Oversee audits of clinical records to assess compliance with statutory requirements and Griffith University Policies and Procedures.
4. Oversee audits of infection control procedures for compliance with policies, procedures and statutory requirements.
5. Oversee audits and quality control of radiography to ensure compliance with policies, procedures and statutory requirements.
6. Make recommendations for the purchase of equipment and instruments to ensure efficient and effective use of resources.
7. Provide advice and guidance on clinical assessment.
8. Consider and investigate other clinical matters which may be presented to the working party as a result of case reviews, or patient surveys.

#### Membership

Dean and Head of School  
Director of Clinical Operations (Chair)  
Professor of Comprehensive Adult Dental Care  
Senior Dental Assistant  
Discipline Heads, as required  
Program Convenors  
General Dental Practitioner (GU Clinic)  
Dental Clinic Practice Manager  
Other relevant members of staff as appointed

#### Reporting

Quarterly to School Committee

## CONSENT

### Introduction

In order to practise in a professionally responsible manner, a dental practitioner must assist patients to make well-informed decisions about treatment procedures. Consent may be of three types; implied, verbal or written. For consent to be obtained the patient must have:

1. Capacity to consent
2. Understand the implications of treatment including:
  - a. material risk
  - b. time, extent and frequency
  - c. outcome
  - d. possible complications
  - e. cost
3. Understand alternative treatment options, including undertaking no treatment
4. Given the consent freely, not under duress

Written consent (*the patient's signature on a document*) does not of itself establish that consent has been obtained. Among the matters, which would be considered by a court of law to establish consent, are:

- the patient was given sufficient and appropriate information on all aspects of the procedure
- the information was provided in such a form that the patient could fully understand it
- the patient, before consenting, had sufficient time to deliberate in an unfettered way on the relevant information
- all possible complications, their frequency, the degree of incapacity they may cause and the possibility of permanence, were fully outlined in a way that the patient could completely understand
- the cost of treatment was fully outlined and understood
- the patient's expectations of treatment outcomes were realistic
- an appropriate referral was offered
- an appropriate diagnosis was established
- an accurate medical history was established and appropriately accounted for in treatment

At the Griffith University Dental Clinic a written general consent is obtained when the patient comes for their first appointment, in order that they understand they may be treated by students under supervision. Further, it establishes that de-identified information or teeth extracted as part of their care may be used for educational and research purposes. It should be noted that this is a general consent. Further information may need to be provided and written consent should be sought under ethics guidelines for research projects. Patients may withdraw treatment at any time but the practitioner has a duty of care to ensure that they will come to no harm and to inform the individual of the risks of ceasing care.

**Capacity to Consent**

People may be considered not to have the capacity if they are:

1. Minors (<16 years)
2. Mentally ill
3. Intellectually impaired
4. Affected by drugs or alcohol rendering them incapacitated.

In the case of minors or other persons with a legal disability the consent of the parent, guardian, or adult guardian<sup>1</sup> should be obtained.

**Clinical Consent**

Every patient should have a treatment plan for each course of care recorded in his or her record in the Patient Management System. In the case of students this must be authorised by a clinical supervisor. The plan should be discussed with the patient or their guardian and the discussion documented in the clinical notes. A print out of the treatment plan should be provided to the patient:

1. On request by the patient
2. The treatment is complex involving numbers of appointments
3. The treatment involves partial dentures, crown and bridge work, implants, molar endodontics, or surgery

**Verbal consent** is acceptable for simple general dental care and should be documented in the records.

**Written consent** should be obtained for more complex treatment as described at item 3 above by asking the patient to sign a copy of the print out of the treatment plan. In addition all minors and cases of adult guardianship require written consent (*see section on guardianship*).

The National Health and Medical Research Council (NHMRC) in 1993 produced a set of guidelines on providing information to patients and recommends that practitioners discuss:

1. The possible or likely nature of the care
2. The proposed approach to treatment including:
  - a. numbers and length of appointments
  - b. possible referrals to other practitioners or specialists
3. Other options for treatment
4. The likely outcomes
5. Any possible complications
6. The likely outcome of have no treatment
7. Cost (*see section on financial consent*)

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<sup>1</sup> The Adult Guardian is a person appointed by the State under the Powers of Attorney Act 1998) (Phone: 0732340870 or 1300653187 or <http://www.justice.qld.gov.au>)

***Financial Consent***

Any treatment undertaken in the Griffith Dental Clinic will require the patient to give financial consent. Patients or their guardians should be informed prior to their next appointment of the likely costs.

**Any treatment plan for which the cost is likely to be more than \$500.00 should be referred to any clinical support staff member who will:**

1. Discuss and/or develop a payment plan.
2. Provide the patient or guardian with a written copy of the costs and
3. Obtain written consent by way of a signature

***Guardianship***

*Minors* Verbal/implied consent is acceptable for examination, radiographs, prophylaxis and simple treatment with the parent present. Written consent should be obtained for all procedures for patients under 16 years of age from the parent or guardian if they are not going to be present.

Occasionally, a parent delegates their responsibility for consenting to treatment on behalf of their minor child to another adult. This may occur for example, in relation to Aboriginal children, where an extended family member is responsible or where both parents work and another provides daily care for the minor. Ideally, this delegation should be in writing and a copy should be scanned into the patient's record.

*Adult Guardianship (Mental and Intellectual Impairment)* Where adults are incapable of providing consent the Guardianship and Administration Act 2000 outlines the substitute decision making process:

- If possible follow an advance Health Directive ("AHD")
- If there is no AHD, follow the direction of a guardian appointed by the Guardianship and Administration Tribunal ("The Tribunal") or any order of The Tribunal
- If the Tribunal has not made a ruling obtain consent from an attorney appointed under an Enduring Power of Attorney
- If there is no appointed attorney obtain consent from the statutory health attorney
- If there is no readily available, culturally appropriate statutory health attorney, contact the Adult Guardian who may provide consent as the decision-maker of last resort.

More details of these processes can be access on <http://www.justice.qld.gov.au>

***Clinical Research***

All clinical research projects must have ethical approval from The Griffith University Human Ethical Review Committee. This process will require the approval of written information for the patient and written consent forms. Researchers must ensure:

1. Patients are provided with approved information.
2. The information and nature of the project is explained to them
3. All discussions are documented in the clinical notes
4. The approved consent is signed and scanned into the patients file

Fees for any activity undertaken in the clinic must have complete appropriate records kept as per the policy & fees for any work undertaken charged through as per normal clinical practices. <http://www.dentalboard.qld.gov.au/publications.htm>

Further information about Human Ethical Review in Australia can be found in the NHMRC document “National Statement on Ethical Conduct in Human Research” available at [http://www.nhmrc.gov.au/guidelines/ethics\\_guidelines.htm](http://www.nhmrc.gov.au/guidelines/ethics_guidelines.htm)



## CULTURAL AND LINGUAL DIVERSITY

### Introduction

Griffith University promotes equal rights and responsibilities for all members of the community who wish to avail themselves of its services regardless of their cultural ethnic, religious background or gender. Griffith University Dental Clinic therefore is committed to ensuring that individuals from diverse cultural and linguistic backgrounds are: <http://www.griffith.edu.au/equity/>

- Informed about their dental health
- Informed about the treatment options available
- Able to access oral health promotion and prevention programmes
- Participating fully in their dental planning and treatment options
- Satisfied with the quality of care provided and able to provide feedback to the service
- Accessing all services available and appropriate to them at the Dental Clinic

### Policy

Numbers of clients will not be able to speak or read English well enough to communicate with dental clinical professionals and other staff. These include those people who are deaf or hearing impaired and communicate through a sign language such as Auslan.

Some of these individuals may, also, not be able to understand written documentation concerning oral health promotion, pre or postoperative care, or consent information. Every effort will be made to provide the assistance necessary.

All actions taken in relation to obtaining adequate multicultural support should be documented in the client's clinical notes, particularly in relation to consent.

### Documentation

Written documentation in some languages is available and should be provided to patients if required. Queensland Health also has available extensive multilingual documents and resources.

### Interpreters

If an interpreter is required a bilingual adult, either family or friend, can be asked to assist. Minors, children, should not be used as interpreters for parents or others. It is advisable that neither staff, other than registered professionals, nor students are used as interpreters except in an emergency.

Queensland Health provides an extensive Health Care Interpreter Services, which may be used for their clients. These interpreters are available either in person or on the telephone by appointment. The contact for the Health Service District Interpreter Service Coordinator in the Gold Coast District is <mailto:GCHInterpreterServices@health.qld.gov.au>

Multicultural Affairs Queensland monitors the Queensland Government Language Services Policy. It provides professional translating and interpreting services and information about services available throughout Queensland. Further, it publishes a Queensland Multicultural Resource Directory, which contains a comprehensive listing of some 1500 key organisations with an ethnic focus in Queensland. Information about this service can be accessed at [http://www.multicultural.qld.gov.au/about\\_MAQ/](http://www.multicultural.qld.gov.au/about_MAQ/)

## DRESS CODE

### Introduction

An excellent standard of presentation is expected of all Dental students and Staff; a smart appearance and professional manner is a very important step towards securing the confidence of patients and colleagues. The dress code is intended to help create a positive image of the School of Dentistry and Oral Health and its students and staff. Additionally, Occupational Health and Safety Legislation and security reasons often dictate what students, staff, dental assistants, receptionists and visitors to clinical and laboratory environments must wear.

The Dress Code will be strictly enforced on Levels 1 and Level 2 of the Centre for Medicine and Oral Health (GH1). On all other levels of the building and on all Griffith University campuses students and staff are expected to dress in a manner that reflects their professional status.

### Code Regulations

1. Hair must be clean and tidy. Long fringes or wispy locks of hair must be secured away from the face. Long pony-tails must be secured in a way to avoid hair falling over the shoulder. Unusual styles, colours or excessive hair gel is not acceptable. Facial stubble and unkempt facial hair is not acceptable.
2. Nails must be clean, short, and manicured. Nail polish (including clear) is not permitted. All rings and wrist jewellery must be removed before entering these areas.
3. Clinic coats must be worn at all times when attending the clinic or laboratory. Ensure that your coats are clean and ironed. Shirt sleeves and tails should not be visible. Ensure ALL the buttons are secured, including those across the shoulder and neck. Clinic coats must not be worn outside of levels 1 and 2 in GH1.
4. Trousers are the preferred attire when wearing clinical coats. They should be straight-legged and shoe length. Shorts, cargo pants, jeans and jogging pants are not acceptable. If female students wish to wear skirts they should be an A-line design and below knee length. Do not wear skirts that are voluminous, with loose threads or raw hems.
5. Shoes must be enclosed, made of a non-porous material, with little or no heel and must be rubber-soled/non-slip. The front of the shoe must completely cover the top of the foot/instep. Trainers, knee length boots, shoes made of fabric or woven strips are unacceptable.
6. Do not chew gum in any of the clinical or laboratory areas. It should be carefully disposed of BEFORE entering these areas.
7. Gloves, masks and goggles must be removed before leaving the dental bay. The exception is when removing contaminated instruments/equipment from the clinic bay to the sterilising room at the end of the treatment session.

8. When wearing a protective mask it must be secured either by the elastic loops around the ears or firmly tied at the back of the head. Masks should not be worn under the nose or chin.
9. Mobile phones are not to be brought into clinical or laboratory areas.
10. Students should avoid wearing loose flowing clothing, which could be caught in machinery. If loose clothing is worn, it should be pinned or tied up. This includes ties, long cuffs and headgear.

### **Unacceptable Dress**

Casual-wear such as:

- T-shirts, singlets, halter-neck tops, boob-tubes, midriff-baring or backless tops
- Jeans, cargos, trackies/sweats, casual shorts, boardies, short shorts, bike shorts
- Mini skirts, evening dresses, mini-dresses or sun-dresses
- Sandshoes, skater shoes, thongs, high heels, sandals, joggers or ugh boots
- Large, loud or offensive jewellery
- False/acrylic fingernails
- Excessive make-up/cosmetics or overwhelming perfume/aftershave
- Lab or clinic coats, gloves or eye goggles whilst outside of the labs/clinics
- Facial piercing

### **Oral and Personal Hygiene**

Hygiene is paramount for infection control and the comfort of others. It is recommended that when dealing with the public students and staff should:

- Have regular oral health checkups and dental treatment
- Use mouthwash before commencing patient treatment and/or restrict the consumption of halitosis-causing agents (i.e. onions, garlic, curry, etc) to the weekends
- Be aware that body odour is unacceptable. It is strongly recommended to shower frequently and use an effective deodorant
- Finger nails and hands are clean
- Maintain a professional appearance by not chewing gum or wearing tongue studs

### **Lab and Clinic Coats**

All students must have one laboratory coat and two clinic coats. These should be washed and ironed regularly. To comply with Infection Control Policy, students must not wear their laboratory or clinic coat outside of the laboratory or clinic. Students who attend labs without the appropriate, clean coat will be excluded from the lab session (this is not an allowable excuse for failure to complete assessment requirements).

Staff are required to wear white clinic coats, which the School provides, in the laboratory and clinical area and not bring coats from home.

## EMERGENCY TROLLEY – CLINIC 1 LEVEL 2 SCHOOL OF DENTISTRY AND ORAL HEALTH

### Resuscitation Equipment must be checked:

- At least once a week and signed at bottom of column
- Expiry date where appropriate noted (mm/yr) or ticked
- ASAP or within 1 hour of use
- Completed checklists must be kept for 3 months as evidence of regular checking and maintenance of equipment

Quarter commencing .... /.... /.... and ending .... /.... /....

DATE (week beginning)														
Alcowipes	1													
Antihistamine tablets	10													
Auto blood pressure machine/4 spare batteries	1													
Epipen 150 child	3													
Epipen 300 adult	3													
Gloves – medium box	1													
Glucose powder	1													
Goggles	2													
Guedels Airway size 000	1													
Guedels Airway size 1	1													
Guedels Airway size 11	1													
Guedels Airway size 3	1													
Guedels Airway size 9	1													
Heart start machine	1													
Needles – 20g	5													
Needles – 21g	5													
Needles – 22g	5													
Nitro-lingual spray 400mg	1													
Orange drink	1													
Oxygen cylinder	1													
Resuscitation bag – adult – disposable	1													
Resuscitation bag – child – disposable	1													
Stethoscope/spare ear plugs	1													
Syringes 10ml	1													
Syringes 3ml	1													
Syringes 5ml	5													
Thermometer	1													
Ventolin inhaler	1													
Yankauer sucker l/s	2													
Yankauer sucker m/s	2													
Yankauer sucker s/s	2													
CHECKED BY:														

## FEES

### Policy

Griffith University Dental Clinic charges fees for its services and the policy and regulation surrounding this process is contained within the Griffith Health Clinic Fee Charging Policy (2007/0010785) which may be accessed at <HTTP://WWW62.GU.EDU.AU/policylibrary.nsf/xmainsearch/f71f7cdf19dae77d4a2573cb0063d219?opendocument>

This policy contains information about the setting, charging and writing off of fees and who is authorised to undertake these activities. The following should be particularly noticed from this policy in relation to the charging of fees:

1. Once clinic fee schedules have been set, staff and students involved in delivering treatment to patients/clients will accurately record treatments undertaken, so that accurate fees can be charged.
2. Fees, as approved by the PVC (Health) in accordance with the process outlined in the policy, cannot be changed by staff or students.
3. Patients/clients are encouraged to settle any monies due at the time of treatment. However, in the case of large amounts, the clinic manager may at their discretion arrange a payment plan whereby regular payments are made by the patient/client to pay fees due.
4. Fees may not be written off other than by those authorised to do so within the policy document. The Director of Clinical Operations, Clinic Manager and PVC have these delegations.

### Fee Schedules

Fee schedules are updated and maintained within the Patient Management System and current fees can be determined within this program. Numbers of schedules exist depending on the type of client

- Griffith University full fee paying private patients treated by professional general dental staff
- Queensland Health patients
- Staff and Students of Griffith University
- Patients receiving treatment from undergraduate students
- Patients treated by post-graduate students – generally the same as for general dental staff
- Specialist and Private Practice Patients

### Payment Plans

Generally, patients/whose care is likely to have a value greater than \$500 should be referred to the Financial Administrator of the Clinic for discussions regarding payments and the development of a payment plan. (*See section on financial consent*). Once a payment plan is decided upon then patients/clients should make regular payments at every appointment. Dentures, crowns and other work, which requires technical support, should only be issued if the patient/client is **not** in arrears with payments.

**Queensland Health Procedures**

Griffith University has a contract with Queensland Health (QH). Under this contract, the cost of a limited range of dental treatment will be billed directly to QH for patients who meet their eligibility criteria and are referred to the clinic. The patient must meet the cost of any treatment, which is not covered. Clinicians, when treatment planning, should explain, very carefully, to the patient the situation and any costs they will have to pay.

The list of procedures is contained in Schedule 4 of the contract between Griffith University and Queensland Health. A laminated copy of this Schedule 4 is provided at each dental chair and is included in this manual at the next section.

**Note:** This section/policy should be read in conjunction with information about financial consent.



# QUEENSLAND HEALTH PROCEDURES

## Schedule 4

### QUEENSLAND HEALTH SERVICES

The following codes are the treatment items currently covered by Qld Health for the treatment of their patients.

#### Item Service Description

011	Comprehensive oral examination ( <i>only one may be claimed every 12 months</i> )
012 <sup>+</sup>	Periodic oral examination
013 <sup>*</sup>	Oral examination – limited ( <i>limit three (3) in a year for emergency care only</i> )
022	Intraoral PA or BW – first exposure only
022A	Intraoral PA or BW subsequent exposure on the same day
111	Removal of plaque and/or stain
114	Removal of Calculus – first visit – limit of one
115	Removal of Calculus – subsequent visit
117	Bleaching, internal – per tooth
121	Topical application of remineralising agent
161	Fissure sealant
165	Desensitising procedure per visit
213	Treatment of acute periodontal infection – per visit ( <i>limited to two visits</i> ) This item describes the treatment of acute periodontal infection(s). It may include establishing drainage and the removal of calculus from the affected tooth (teeth).
311	Removal of a tooth or part(s) thereof A. 1 <sup>st</sup> tooth extracted from each quadrant B. step down fee for 2 <sup>nd</sup> tooth in same quadrant
314	Sectional Removal of a tooth A. 1 <sup>st</sup> tooth extracted from each quadrant B. step down fee for 2 <sup>nd</sup> tooth in same quadrant
322	Surgical removal of a tooth or tooth fragment not requiring removal of bone or tooth division A. 1 <sup>st</sup> tooth extracted from each quadrant B. step down fee for subsequent teeth in same quadrant
323	Surgical removal of a tooth or tooth fragment requiring removal of bone A. 1 <sup>st</sup> tooth extracted from each quadrant B. step down fee for subsequent teeth in same quadrant
324	Surgical removal of a tooth or tooth fragment requiring both removal of bone and tooth division A. 1 <sup>st</sup> tooth extracted from each quadrant B. step down fee for subsequent teeth in same quadrant
411	Direct pulp capping
414	Pulpotomy
415 <sup>^</sup>	Complete chemo-mechanical preparation of root canal – one canal
416 <sup>^</sup>	Complete chemo-mechanical preparation of root canal – up to 2 additional canals
417 <sup>^</sup>	Complete /root canal obturation – one canal – inclusive of radiographs
418 <sup>^</sup>	Root canal obturation – up to 2 additional canals – inclusive of radiographs
419 <sup>^*</sup>	Extirpation of pulp or debridement of root canal(s) – emergency or palliative
451 <sup>^*</sup>	Removal of root filling – per canal
455 <sup>^*</sup>	Additional visit for irrigation and/or dressing of the root canal system – per tooth ( <i>not in conjunction with 415,416,417,or 418</i> )
511	Metallic restoration - one surface - direct
512	Metallic restoration - two surfaces – direct

513	Metallic restoration - three surfaces – direct
514	Metallic restoration - four surfaces – direct
515	Metallic restoration - five surfaces – direct
521	Adhesive restoration – one surface – anterior tooth – direct
522	Adhesive restoration – two surfaces – anterior tooth – direct
523	Adhesive restoration – three surfaces – anterior tooth – direct
524	Adhesive restoration – four surfaces – anterior tooth – direct
525	Adhesive restoration – five surfaces – anterior tooth – direct
531	Adhesive restoration - one surface - posterior tooth - direct
532	Adhesive restoration - two surfaces - posterior tooth - direct
533	Adhesive restoration - three surfaces - posterior tooth - direct
534	Adhesive restoration - four surfaces - posterior tooth - direct
535	Adhesive restoration - five surfaces - posterior tooth – direct
572*	Provisional restoration – not as part of a definitive restoration procedure ( <i>emergency only</i> )
575	Pin retention - per pin
577	Cusp capping – per cusp
578	Restoration of an incisal corner – per corner
596	Recementing of inlay/onlay
651	Recementing crown or veneer
652	Recementing bridge or splint – per abutment
711	Full Maxillary Denture
712	Full Mandibular Denture
719	Full Maxillary & Mandibular Denture
716**	Metal palate or plate additional to 711, 712 or 719
721A	Partial Maxillary Denture 1 tooth
721B	Partial Maxillary Denture 2 teeth
721C	Partial Maxillary Denture 3 teeth
721D	Partial Maxillary Denture 4 teeth
721E	Partial Maxillary Denture 5-9 teeth
721F	Partial Maxillary Denture 10-13 teeth
722A	Partial Mandibular Denture 1 tooth
722B	Partial Mandibular Denture 2 teeth
722C	Partial Mandibular Denture 3 teeth
722D	Partial Mandibular Denture 4 teeth
722E	Partial Mandibular Denture 5-9 teeth
722F	Partial Mandibular Denture 10-13 teeth
727A**	Partial maxillary denture – cast metal framework 1 tooth
727B**	Partial maxillary denture – cast metal framework 2 teeth
727C**	Partial maxillary denture – cast metal framework 3 teeth
727D**	Partial maxillary denture – cast metal framework 4 teeth
727E**	Partial maxillary denture – cast metal framework 5-9 teeth
727F**	Partial maxillary denture – cast metal framework 10-13
728A**	Partial mandibular denture – cast metal framework 1 tooth
728B**	Partial mandibular denture – cast metal framework 2 teeth
728C**	Partial mandibular denture – cast metal framework 3 teeth
728D**	Partial mandibular denture – cast metal framework 4 teeth
728E**	Partial mandibular denture – cast metal framework -9 teeth
728F**	Partial mandibular denture – cast metal framework 10-13 teeth
731	Retainer – per tooth additional to 721 or 722
732	Occlusal rest – per rest – where not used as part of a retainer
736	Immediate tooth replacement – per tooth
741	Adjustment of pre-existing denture
743	Relining – complete denture – processed
744	Relining – partial – processed

- 761\*\* Reattach undamaged tooth or clasp
- 762\*\* Replacing clasp on denture
- 763\*\* Repair broken denture base of a complete denture
- 764\*\* Repair broken base of a partial denture
- 765 Replacing first tooth on denture  
Step down fee for replacement of subsequent teeth for same denture
- 768 Adding tooth to partial denture to replace an extracted or decoronated tooth – per tooth
- 776 Impression where required for denture repair/modification
- 737 Resilient lining – only with new denture or Items 737 and 743 for existing complete denture; and items 737 and 744 for existing partial denture
- 738 Wrought bar
- 745 Remodelling complete denture
- 746 Remodelling partial denture
- 753^^ Cleaning and polishing of pre-existing denture
- 771 Tissue conditioning preparatory to impressions (upper and/or lower) per application.  
(*State number of applications*)
- 845 Passive fixed appliance
- 911 Palliative care (*Not to be claimed with an extraction, endodontic or restorative treatment on same tooth*) An item to describe interim care to relieve pain, infection, bleeding or other problems not associated with other treatment.

+ School services only

\*Emergency care only

\*\*Charges for casting fee, including GST, may be passed on to patient.

^Only one molar endodontic treatment per course of care

^^ Domiciliary visits only

## **GUIDE DOGS**

### **Hearing and assistance dogs**

Griffith University follows the conditions stated in the Queensland Government Guide, Hearing and Assistance Dogs Bill 2008. This Bill specifically enables and enshrines the rights of individuals reliant on dogs for guidance to take them into public places. Schedule 1 of this Bill specifically exempts a number of areas of a health service facility from these provisions. Amongst exempt areas are procedure rooms. Therefore, the Griffith University Dental Clinic requests that assistance dogs are left in the waiting room to assist in infection control compliance.

# INCIDENT MANAGEMENT AND REPORTING

## Critical Clinical Incidents

### Definition

A critical clinical incident is an unexpected occurrence involving death or serious physical or psychological injury and includes any process variation from which a recurrence would carry a significant chance of adverse outcome.<sup>2</sup>

Critical incidents in dentistry include the following:

- Anaphylactic reaction
- Cardiac arrest or stroke whilst undergoing treatment
- Inhaling/ingesting foreign body
- Treatment of the wrong tooth/wrong body region/wrong patient
- Medication errors
- Any other unexpected occurrence which has/could resulted/result in a serious adverse outcome to a patient.

### Immediate Notification

Supervisor of Clinical Session  
Convenor of Course  
Senior Dental Assistant  
Director of Clinical Operations  
Dean, School of Dentistry and Oral Health

Every effort should be made to notify the Director of Clinical Operations; however, if the clinic director is unavailable then the Dean should be contacted. Formal notification should occur as soon as is practicable but at a maximum within 24 hours of the incident because it must be reported as soon as possible to meet our medical indemnity obligations.

Initially notification should take place by telephone and then formal notification should be made on the standard incident report form available at [http://www.griffith.edu.au/data/assets/pdf\\_file/0006/73563/incident-injury-report-form.pdf](http://www.griffith.edu.au/data/assets/pdf_file/0006/73563/incident-injury-report-form.pdf) or from the Senior Dental Assistant. This form should then be forwarded to the Director of Clinical Operations who will complete formal procedures for indemnity purposes and notify senior university executive as required.

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<sup>2</sup> The Clinicians Toolkit for Improving Patient Care, NSW Health Department 2001.

## Investigation

Critical incidents should be investigated by the course convenor in conjunction with supervising dentist of the session in the case of clinical teaching sessions. Incidents which occur involving the professional dental practice should be investigated by the Director of Clinical Operations. If appropriate, depending on the seriousness of the incident, a root cause analysis framework should be utilised and a non-clinical person should be involve in a three man team.

Once any investigation is complete than a report should be written which includes the following:

- Brief description of the incident (approximately one or two lines long). To ensure confidentiality and to de-identify the case, there should be no specification of the patient/staff names, department names or other details. These details will be reported to the medical indemnifiers by the Clinic Director.
- Brief description of the investigation and analysis
- Recommendations to prevent further occurrence, to improve management, or to reduce the risk to the University

## Reporting

The written report should be sent to:

- Director of Clinical Operations
- Dean, School of Dentistry and Oral Health
- Pro-Vice Chancellor (Health)
- Clinical Reference Group who will be responsible for ensure follow-up on recommendations and actions.

## Skin Breach Injuries

### Management of Exposure to Blood and Blood Substances

These guidelines apply to:

- Injuries from all sharp instruments contaminated with blood or body substances
- Splashes to mucous membranes from blood and body substances
- Splashes to non-intact skin from blood and body substances
- Spillage of blood to large areas of intact skin

#### Initial Management

- If a contaminated sharp object penetrates the skin, the skin must be washed well with soap and water. The same applies if blood gets onto the skin, even in the absence of cuts or abrasions.
- Should the eyes become contaminated, rinse the eyes gently but thoroughly with water or normal saline.
- Blood spray into the mouth must be spat out and the mouth rinsed with water several times.
- All sharps injuries and blood exposure incidents are to be reported to an immediate supervisor or occupational health officer immediately after the incident. Ensure an incident form is completed. Incidents that do not occur at work should be reported to the local doctor or accident and emergency department at the nearest hospital.
- Regardless of the source of exposure, the recipient should immediately be examined and the risk assessed by a trained health care worker or doctor with experience in the management of blood borne diseases and infections. *Griffith University, School of Dentistry and Oral Health will assist clinicians with referral to Griffith Medical Service or a Medical Practitioner of their choice.*

Infectious diseases, which include the blood borne viruses (BBV) human immunodeficiency virus (HIV), hepatitis B virus (HBV), and hepatitis C virus (HCV), may be transmitted by significant exposure (skin breach injury or splash) to blood or other body substance. Adherence to standard precaution guidelines remains the first line of protection for health care workers against occupational exposure to BBV. However, once an injury has occurred it is important to minimise the risk of seroconversion by following an accepted protocol and medical regime. Prophylaxis should be offered on the basis of the risk of infection associated with the injury or exposure

#### **First Aid for Skin Break Injuries** *(all staff are issued with a reminder card which they should carry at all times)*

1. Gently encourage bleeding.
2. Wash the area of contamination well with soap and water.
3. Place a dressing if required.
4. If the eyes have become contaminated rinse gently but thoroughly with water or normal saline. Make sure that the eyelids are everted and continue for at least 30 seconds. (Eye stream is available in all first aid kits).
5. If clothing contaminated, remove and shower if necessary.
6. If blood is sprayed in the mouth, spit out into a contaminated sink, and then rinse the mouth with water several times.
7. Inform appropriate person to ensure necessary further action is undertaken.



**Reporting**

1. All injuries are to be reported to an immediate supervisor.
2. Ensure that an accident report is completed and signed by the immediate supervisor.
3. After all injuries involving a patient (either directly or indirectly), the staff/student should be referred to Staff/Student Health on 5552 8794 or Xtn 28794, who will arrange an appointment and on-going medical management.
4. Staff/student to be provided with 2 Cab charges to attend Staff/Student Health and to travel home.
5. Director of Clinical Operations (DCO) or delegate to be informed.
6. Source patient to be interviewed by DCO or delegate and, with consent, referred to their general medical practitioner for a blood testing to determine infectivity.
7. All actions taken are to be clearly documented in the patient record.

**(Appendix XI – Incident Report Form - refer to web:**

[http://www.griffith.edu.au/school/doh/pdf/incident\\_hazard\\_report\\_form\\_incl\\_privacy.pdf](http://www.griffith.edu.au/school/doh/pdf/incident_hazard_report_form_incl_privacy.pdf))

**Health Policy**

The School of Dentistry and Oral Health Policy outlines in detail recommended immunisation schedules and requirements relating to infectious diseases for all clinical staff and students. This policy can be accessed on the Griffith University website:

<http://www.griffith.edu.au/school/doh/pdf/DOHHealthPolicyV3.07.pdf>

## Occupational Health & Safety Incidents

Griffith University Health and Safety Policy describes the University's commitment to managing workplace health and safety and may be accessed at <HTTP://WWW62.GU.EDU.AU/policylibrary.nsf/xmainsearch/867bba87c079f3964a256be4006355c8?opendocument>

All injuries, which occur in the clinical or laboratory areas, must be reported to the immediate supervisor of the clinic or senior dental assistant on duty. An incident report form should then be completed. Blank forms may be obtained from the senior dental assistant, any assistant on the clinic floor, directly from the web.

## **INTRAMURAL PROFESSIONAL PRACTICE (IPP)**

Practitioners, who are members of staff, undertaking private practice in the Griffith University Dental Clinic, must comply with all aspects of the Griffith University Intramural Professional Practice Policy (2007/0010786) which can be accessed at <HTTP://WWW62.GU.EDU.AU/policylibrary.nsf/xmainsearch/8f2eac356ee5c3fd4a2573cb0063d25b?opendocument>

This Policy falls within the scope of the Consultancy, Private Practice and Contract Research Policy (2005/0030254). In the event of any inconsistency between this Policy and the Consultancy, Private Practice and Contract Research Policy, it will be the Consultancy, Private Practice and Contract Research Policy that will prevail to the extent of the inconsistency.

Schedule 1 of the Intramural Professional Practice Policy specifically states additional conditions, which apply in the School of dentistry and Oral Health (DOH) Clinics. Following quotes Schedule 21 in its entirety:

### **SCHEDULE 1 – School of Dentistry and Oral Health (DOH) Clinics**

1. Intramural professional practice is available to appropriately authorised staff of the School of Dentistry and Oral Health who are registered as:
  - (i) A Dental Prosthetist under the Dental Technicians and Dental Prosthetists Registration Act 2001; or
  - (ii) A General Dental Practitioner, Special Registration Practitioner or Specialist Dental Practitioner with the Dental Board of Queensland.
2. Arrangements for intramural professional practice must be approved by the Head of School and Director of Clinical Operations prior to the commencement of a calendar year, or prior to the staff member starting practice for new employees. These arrangements may be amended from time to time on the approval of the Head of School and Director of Clinical Operations.

### **Administration and Dispersement of Income**

3. All intramural professional practice treatment carried out in a Griffith dental clinic and associated facility including dental laboratory will be on a fee-paying basis.
4. Staff members engaging in intramural professional practice will set their own fees for treatment using 150% of the Department of Veterans Affairs rate as a minimum, but allowing for a discount of 10% as is the usual practice for treatment given to Griffith staff and students.
5. A staff member's fee schedule will be made available to the Dental Clinic Patient Management System administrator at least four weeks prior to starting practice.

6. Any changes to the fee schedule must be notified to the Patient Management System administrator at least four weeks prior to their implementation.
7. Technical casting fees may be costed directly to a patient/client in addition to the standard fee schedule.
8. Staff members granted rights of intramural professional practice will receive 40% of the net earnings\* from their own patient/client income earned from treatment provided within Health Group-run clinics. The remaining 60% shall be retained by the University (including Corporate, Group and host School levels) as payment for general materials, administrative and nursing support, and the use of the Clinic facilities.
9. At the end of each month, the Clinic administrator will reconcile all intramural professional practice receipts for that month, and determine the appropriate amount to be paid to the relevant staff member. The staff member will be asked to invoice the Clinic for the 40% of collected fees for the month.

### **Dissatisfied Patients/Clients**

In the case of DOH Clinics, the Director of Clinical Operations will assume the role of clinic manager as outlined in Section 8 Dissatisfied Patients/Clients of this policy

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\* Net earnings – means the fee charged for a specific treatment by a staff members undertaking intramural professional practice, less any costs deemed by the Director of Clinical Operations as external costs incurred by the University (e.g., including but not limited to radiography, laboratory services, or extraordinary materials costs such as implant components and specialist surgical supplies).

## PATIENT RECALLS

The clinic will recall patients at the instruction of any professional practitioner or student.

### **Private Patients**

Private patients can be recalled at any period of time as per the clinician's instruction. Please notify reception staff at the time the recall needs to be set up.

### **Queensland Health Patients**

Queensland Health will not cover the cost of any patient being recalled. The patient must be told that their Queensland Health cover will only extend for the course of treatment planned at the outset of their treatment at the Griffith University Dental Clinic.

Queensland Health patients can be given the option of being recalled, but it must be made clear to the patient that if they return of their own accord, it will be as a private patient and they will be liable for all cost incurred. If further treatment is required we are not able to contact Queensland Health and ask that the patient be referred to Griffith University under the contractual arrangement.

## PATIENT RIGHTS AND RESPONSIBILITIES

### Rights

Patients can expect:

To receive high quality oral health care that is provided in a professional, friendly and appropriate manner.

The Griffith Dental Clinic is committed to continual improvement of the quality of care and meeting recognised standards.

Clear information about their treatment options and the likely outcomes so that they can make informed decisions about their care. Their condition and treatment options should be discussed with them so that they may agree to or refuse treatment, if they wish

To be treated with dignity and respect in an understanding and safe environment that acknowledges cultural and religious beliefs.

All people involved in their treatment and care has a responsibility to keep their personal information confidential.

Copies of your personal records may be obtained on request.

To comment on the quality of their experience in the Dental Clinic.

Request the presence of other people, including a family member, carer, friend, advocate or interpreter to help them understand information about their care and treatment.

**Responsibilities**

Patients have a responsibility to:

Provide accurate information about their medical and dental conditions.

Tell the dental professional about changes in their medical or dental status.

Follow advice, including the treatment plan, recommended by the practitioner coordinating their care.

Show courtesy and consideration of other patients, the Clinic staff and for the property of others.

Keep appointments and attend on time.

Attend for treatment in an appropriate state and conduct yourself with courtesy.

Tell us if you are unhappy with the care they receive.

Settle any account before leaving the Centre.

Accept the consequences of declining recommended treatment.



## PRIVACY AND CONFIDENTIALITY

### Employee/Student Responsibility

Information – dental, medical and personal – disclosed and recorded during treatment, is confidential. Under no circumstances should patients' affairs be discussed within or outside the GU Dental Clinic, except where it directly pertains to their treatment and even then the patient's consent should be sought by discussion. All health professionals not only have an ethical responsibility to maintain confidentiality but a legal one. Breach of confidentiality could give rise to either professional disciplinary action or even to a civil suit for damages under the Commonwealth Privacy Act 1988. These requirements apply to all staff and students who handle documents that contain confidential patient health information. Health information includes name, address, clinical details, medical/dental information and appointment information. Individuals should be extremely careful remember:

- To be extremely careful when providing information on the telephone
- That relatives are not entitled to information without patient consent
- Only the parent or guardian of a minor is entitled to information
- To be extremely careful in cases of child custody

### Requests for Information

Requests for information may come from many sources, among which, but not exclusive, are:

- Medical/Dental Practitioners
- Members of Parliament
- Police
- Coroner's court
- Solicitors
- Freedom of Information (FOI)

All requests, except those from Professional Practitioners, should be referred to the Director of Clinical Operations, who in turn will process such requests through the University FOI officer or other appropriate channel.

Requests from other professional practitioners should be processed by asking the patient to complete and sign an Authority to Release Information form which is available from the Manager of the Clinic.

### Legislation and Privacy Plan

As required by legislation Griffith University has an Information Security Policy (02/0456) and a Privacy Plan. Appendix 1 of the Privacy Plan has specific information relating to health information collected in Griffith University Health Clinics. These two documents may be accessed at:

[HTTP://WWW62.GU.EDU.AU/policylibrary.nsf/xmainsearch/abfcb63903ce5c2f4a256c710063d74f?opendocument](http://WWW62.GU.EDU.AU/policylibrary.nsf/xmainsearch/abfcb63903ce5c2f4a256c710063d74f?opendocument)  
<http://www.griffith.edu.au/office-vice-chancellor/key-university-documents/griffith-university-privacy-plan>

## PROFESSIONAL INDEMNITY

### Staff

Employees undertaking professional practice, including the supervision of students, on behalf of the University are covered by its insurances (including indemnity and medical malpractice insurance where applicable). Professional practitioners may wish to hold additional insurance cover and should discuss this with their professional association or a registered medical indemnifier. For the purposes of registration the University will provide documentation, which verifies professional indemnity cover and employment

### Intramural Professional Practice

Staff undertaking private professional practice must hold and maintain their own insurance (including indemnity and medical malpractice insurance where applicable) to their professional work regardless of whether the professional practice is undertaken intramurally or in settings external to the University. Staff members seeking to undertake intramural professional practice may be required to present evidence to the University that insurance coverage is held prior to commencing practice.

It is the responsibility of staff members to ensure that their insurance cover is up to date. Further information regarding intramural professional practice can be found in the Griffith Health Intramural Professional Practice Policy (2007/0010786) at the following link:

<HTTP://WWW62.GU.EDU.AU/policylibrary.nsf/xmainsearch/8f2eac356ee5c3fd4a2573cb0063d25b?opendocument>

# RECORDS

## Guidelines For Medical Histories And Clinical Notes

### Description

These guidelines provide information for all clinicians on the management and keeping of clinical records in the Griffith University Dental Clinic. The guidelines are written to assist with continuity of patient care and to ensure that Griffith University Dental Clinic Patient Records meet legal requirements.

<http://www.dentalboard.qld.gov.au/publications.htm>

### Related Policies and Procedures

Griffith University Student Training Materials for the Patient Management System

Griffith University Staff Training Materials for the Patient Management System

### Introduction

The Griffith University Dental Clinic is located in the School of Dentistry and Oral Health, in the Centre for Medicine and Oral Health, on the Gold Coast. The Clinic treated its first patients at the end of 2005. Dental professionals, including technicians, prosthetists, therapists, hygienists and dentists are trained side-by-side in collaboration with the Medical School, and treatments are provided to members of the general public. Also professional practices, both general and specialist are operated from the clinical facilities. Because of the large number of practitioners who work within the clinic, it is essential that records are accurately created in order to ensure continuity of patient care.

The GU clinic patient records are electronic and contain patient details including their medical history, details of the treatment, advice that the patient has received and is currently receiving, and treatments planned for the future. The records computer system is secure and meets the requirements of National and State Privacy Legislation. Currently the only components of the record which are not electronic are the Medical History and Consent form which all patients complete on initial presentation to the clinic and the radiographic record. The information collected on the Medical History/Consent form is entered into the electronic patient management system (PMS) at the first appointment and this piece of paper is archived to secure storage. It is planned that radiography will become digital by the end of 2007.

### Medical Histories

Medical History/Consent forms are for screening purposes only, and serve to highlight possible significant medical problems that require further investigation. The information on the form and collected from consultation should be entered into the computer at the first appointment before the patient departs. It is a practitioner/student responsibility to obtain this information and in the case of a student it must be checked by a supervisor.

Details of the medical history that require special precautions to be taken must be acknowledged and a medical alert icon activated for the following conditions:

- Allergies
- Anticoagulant therapy
- Antibiotic cover required
- Immunosuppression
- Creutzfeldt\_Jacob disease

The icon is a red cross on the top of the screen. (Refer to training manual for process of activation)

Medical histories should be updated every **six** months and a note made in the record that this has occurred.

### **Charting**

Every patient should have an examination. Other than for emergency treatment, any general dental patient should have a full charting and subsequent treatment plan developed. While specialist dentists are not required to undertake a full charting unless this is an integral part of their treatment, they should undertake general visual examination. Other obvious problems should be noted and the patient and referring dentist advised accordingly. Charting is generated electronically and a guide to the symbols can be found in the PMS training manual.

Periodontal, orthodontic and pathology (both intraoral and extraoral) are available in the PMS. (see training manual for operational detail). Attached at Appendix A is a standardised system for recording information on the pathology tabs.

### **Clinical Notes**

Clinical notes are an essential component of the patients visit, and form a legal document detailing what occurred. There should be an entry on the notes page for every contact with the patient including by telephone and letter. Many cases that proceed to litigation do so some time after treatment, when the clinician's memory of the treatment has faded. Also, the clinician may not be aware of any adverse outcome at the time, so detailed note taking becomes the only reliable means of documenting what transpired, and becomes the only means of defence in a complaints scenario. The legal requirements state that notes should be contemporaneous therefore they must be completed at the appointment when the patient is seen.

Following are some general guidelines on what should appear in the patients' notes after each visit. (Standardised abbreviations for recording information in GU notes is at Appendix B)

#### **Date:**

The computer software will automatically record the date. Please note however that it is a legal requirement to always enter the date that treatment is carried out, and should always be included when using traditional paper notes.

#### **Name of Practitioner:**

The computer software will automatically record each practitioner's code beside the date and provide a computer sign off. Please note, however that it is a legal requirement to be able to identify the practitioner and the practitioner should sign the records at the end of each visit if using paper records.

#### **Area of Treatment:**

FDI notation (Appendix C) should be used to identify the tooth/teeth which are being treated.

**Radiographs:**

Any radiographs taken must be recorded and the number of the machine on which they were taken. If the patient is referred to specialist radiography practice outside Griffith then this must also be recorded.

**Procedural Details:**

Clear concise details of the procedure undertaken should be included. Information on type of filling and materials used should be included.

**Preoperative Warnings:**

Any preoperative warnings given e.g. risk of paraesthesia should be noted. When appropriate warnings are given, patients are less likely to be alarmed if there is discomfort. When documented correctly, you can demonstrate these were given in the case of complaints.

**Postoperative Instructions:**

Any post operative instructions given should be noted. For example this may include warnings of possible swelling, discomfort, possibilities of cheek or lip biting etc.

**Discussions:**

Any significant discussions undertaken with the patient about options, for treatment cost, questionable prognosis of treatment. This is especially important during early visits when treatment plans are being formulated. Similarly, if, as does happen, the treatments plan changes during treatment, this must be documented clearly.

**Medications:**

Local anaesthetics administered should be recorded – this should include type of anaesthetic, dose and mode of administration. Any drugs prescribed such as analgesics or antimicrobials should be recorded. If the patient requires antibiotic cover prior to dental care then it should be recorded that the patient has taken the prescribed prophylactic dose.

**Disposal of the patient:**

This may take a number of formes such as the plan for the next appointment, the review or recall period or referral to another practitioner.

**Attendance:**

Should the patient fail to attend, cancel their appointment, or arrive late this should also be recorded.

As a general guide, always write clinical notes with the thought that it may be someday viewed by a third party. This could be the patient, another dentist, or a patient's legal counsel. In the event of an adverse outcome, inadequate notes can be disastrous.

Some examples of appropriate notes are given at Appendix D

**References**

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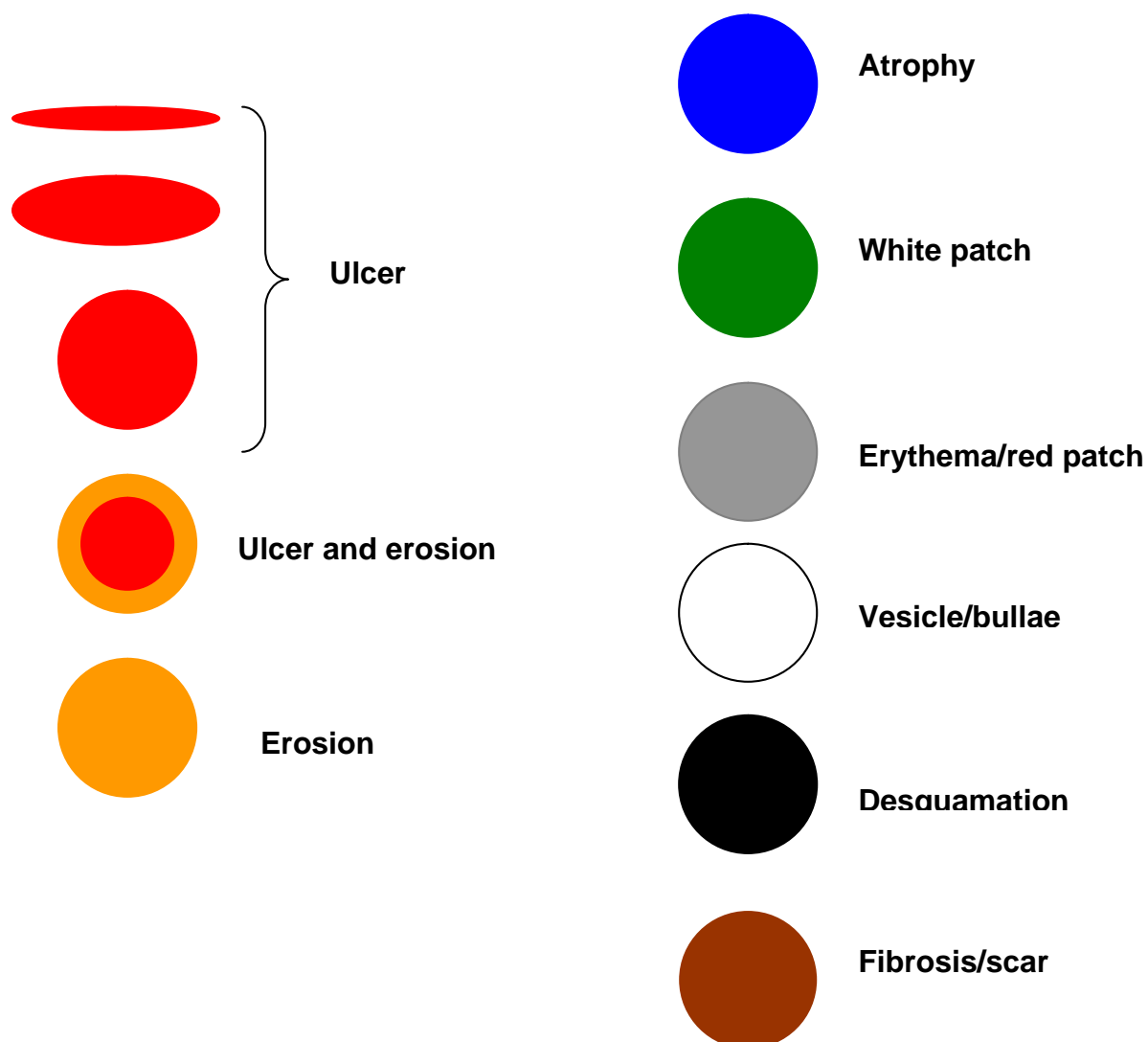
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## Oral Mucosal Findings Chart



## ***Abbreviations***

### **A**

Acid-etch Composite Resin	AECR
Acidulated Phosphate Fluoride	APF
Acquired Immunodeficiency Syndrome	AIDS
Acrylic Jacket Crown	AJC
Acute Myeloid Leukaemia	AML
Adjustment	Adj
Alginate Impression	Alg
Amalgam	Amal
Anterior	Ant
Appointment	Appt
As Soon As Possible	ASAP
Atraumatic Restorative Technique	ART

### **B**

Basal Cell Carcinoma	BCC
Bitewing Radiographs	BW
Black Silk Suture	BSS
Blood Pressure	BP
Body Weight	BW
Bone Marrow Transplant	BMT
Buccal	B

### **C**

Calcium Hydroxide	Ca(OH) <sub>2</sub>
Cancelled	Canc
Carcinoma	Ca
Carious Exposure	C Exp
Catgut Sutures	CGS
Cementoenamel junction	CEJ
Centric Occlusion	CeO
Centric Relation	CeR
Cephalometric	Ceph
Chest radiograph	CXR
Chlorhexidine	CHX
Chrome Cobalt	CrCo
Chronic Lymphocytic leukaemia	CLL
Chronic Myeloid Leukaemia	CML
Cigarettes	Cigs
Class (I,II,III,IV, & V)	CI (I,II,IV&V)
Clinical Periodontal Index of Treatment Need	CPITN
Complains of	C/O
Consultation	Cons
Crossbite	X-Bite
Crown	Cr

### **D**

Date of Birth	DOB
	↓
Decreased	
Dental Health Education	DHE
Dentist	DO
Diabeties mellitus	DM
Diagnosis	Dx
Differential diagnosis	DDx
Distal	D



**E**

Ear, Nose & Throat  
 Electrocardiogram  
 Electroencephalogram  
 Endodontics  
 Epstein Barr Virus  
 Erythema Multiforma  
 Erythrocyte Sedimentation Rate  
 Examination  
 Exodontia

ENT  
 ECG  
 EEG  
 Endo  
 EBV  
 EM  
 ESR  
 Exam  
 Exo

**F**

Family History/Social History  
 Fissure Sealant  
 Fluoride  
 Fracture  
 Full Blood Count  
 Full Gold Crown  
 Full Lower Denture  
 Full Upper and Lower Denture  
 Full Upper Denture

FH  
 FS  
 F  
 #  
 FBC  
 FGC  
 -/F  
 F/F  
 F/-

**G**

General Anaesthetic  
 General Dental Practitioner  
 General Medical Practitioner  
 Glass Ionomer Cement  
 Gutta Percha

GA  
 GDP  
 GMP  
 GIC  
 GP

**H**

Haemoglobin  
 Hepatitis  
 Herpes Simplex Virus  
 Herpes Varicella Zoster Virus  
 History  
 Hodgkin's Lymphoma  
 Hormone Replacement Therapy  
 Human Immunodeficiency Virus  
 Human Papilloma Virus

Hb  
 Hep  
 HSV  
 VZV  
 Hx  
 HL  
 HRT  
 HIV  
 HPV

**I**

Immediate Denture  
 Intermediate Restorative Material  
 Impression

Immed  
 IRM  
 Imp

Incisal  
 Increased  
 Infection  
 Inferior Dental Nerve/Mandibular Nerve  
 Intermaxillary fixation  
 International Normalised Ratio  
 Intramuscular  
 Intraoral  
 Intravenous  
 Irrigation

I   
 Infn  
 IDN  
 IMF  
 INR  
 IM  
 I/O  
 IV  
 Irig

**K**

Kalsogen/Kalsogen/Kalzinogen  
Kaposi Sarcoma

Kal  
KS

**L**

Labial  
Lateral  
Left Hand Side  
Leukoplakia  
Lichen planus  
Lingual  
Local Anaesthesia  
Lymph Nodes

Lab  
Lat  
LHS  
LKA  
LP  
L  
LA  
LN

**M**

Mandible/mandibular  
Maxilla/maxillary  
Maxillary Mandibular Relationship  
Medical  
Medical History  
Medium Rhomboid Glossitis  
Mesial  
Motor Vehicle Accident  
Mouthguard  
Multiple sclerosis

Mand  
Max  
MMR  
Med  
MHx  
MRG  
M  
MVA  
M/Guard  
MS

**N**

Negative  
Next Visit  
No Abnormality Detected  
Non-Hodgkin's Lymphoma

-ve  
NV  
NAD  
NHL

**O**

Occlusal  
On examination  
Oral & Maxillo Facial Surgery  
Oral Hygiene Instruction  
Orofacial granulomatosis  
Orthodontics  
Orthopantomographic Radiograph

O  
O/E  
OMF  
OHI  
OFG  
Ortho  
OPG

**P**

Palatal  
Partial mandibular denture  
Partial maxillary and mandibular dentures  
Partial maxillary denture  
Pathology  
Patient  
Pediatric Dentistry  
Periapical radiographs  
Periodontics  
Permanent  
Porcelain Fused to Metal Crown  
Post core  
Posterior  
Positive  
Post-operative  
Prescribe/Treatment  
Preventive  
Preventive Resin Restoration

P  
-/P  
P/P  
P/-  
Path  
Pt  
Pedo  
PA  
Perio  
Perm  
PFM or VMK  
PC  
Post  
+ve  
Post-op  
Rx  
Prev  
PRR

Primary	1°
Prophylaxis	Prophy
Porcelain jacket crown	PJC
Prosthetics	Pros
<b>R</b>	
Recurrent Aphthous Stomatitis	RAS
Refer	Ref
Relative Anaesthesia	RA
Relief of Pain	ROP
Reline	Rel
Repair	Rep
Right Hand Side	RHS
Root Canal Treatment	RCT
Root Planing	RP
<b>S</b>	
Scale and Clean	S/C
Secondary	2°
Sjogren's syndrome	SjS
Sodium Fluoride	NaF
Squamous cell carcinoma	SCC
Stainless Steel	SS
Stannous Fluoride	SnF <sub>2</sub>
Surgical Removal	S/R
Systemic Lupus Erythematosus	SLE
<b>T</b>	
Temperomandibular Joint	TMJ
Temperomandibular Joint Pain Dysfunction	TMPD
Temporary	Temp
Tender to Percussion	TTP
Treatment Plan	TP
Trigeminal Neuralgia	TN
<b>Z</b>	
Zinc Oxide Eugenol	ZOE
Zinc Phosphate Cement	ZnP

## Federation Dentaire International Notation (FDI)

Methods of tooth notation have evolved over the years and there is now general global acceptance of the FDI system as the most appropriate system to provide maximum precision, clarity and compatibility with typing and computing requirements. It should be remembered that the only really safe method of recording teeth is to write a full description and this should be utilised along with the FDI notation if there is likely to be any confusion.

In FDI two-digit system of tooth numbering of the permanent and deciduous dentition the first number represents the quadrant starting at the right maxillary quadrant and working in a clockwise direction (1—4 for the permanent teeth and 5—8 for the deciduous teeth). The second digit identifies the tooth counting from the midline backwards. The table shown gives the actual number for each tooth.

<b>Permanent Dentition</b>			
Maxillary right third molar	18	Maxillary left third molar	28
Maxillary right second molar	17	Maxillary left second molar	27
Maxillary right first molar	16	Maxillary left first molar	26
Maxillary right second bicuspid	15	Maxillary left second bicuspid	25
Maxillary right first bicuspid	14	Maxillary left first bicuspid	24
Maxillary right canine (cuspid)	13	Maxillary left canine (cuspid)	23
Maxillary right lateral incisor	12	Maxillary left lateral incisor	22
Maxillary right central incisor	11	Maxillary left central incisor	21
Mandibular right central incisor	41	Mandibular left central incisor	31
Mandibular right lateral incisor	42	Mandibular left lateral incisor	32
Mandibular right canine (cuspid)	43	Mandibular left canine (cuspid)	33
Mandibular right first bicuspid	44	Mandibular left first bicuspid	34
Mandibular right second bicuspid	45	Mandibular left second bicuspid	35
Mandibular right first molar	46	Mandibular left first molar	36
Mandibular right second molar	47	Mandibular left second molar	37
Mandibular right third molar	48	Mandibular left third molar	38

<b>Deciduous Dentition</b>			
Maxillary right second molar	55	Maxillary left second molar	65
Maxillary right first molar	54	Maxillary left first molar	64
Maxillary right canine (cuspid)	53	Maxillary left canine (cuspid)	63
Maxillary right lateral incisor	52	Maxillary left lateral incisor	62
Maxillary right central incisor	51	Maxillary left central incisor	61
Mandibular right central incisor	81	Mandibular left central incisor	71
Mandibular right lateral incisor	82	Mandibular left lateral incisor	72
Mandibular right canine (cuspid)	83	Mandibular left canine (cuspid)	73
Mandibular right first molar	84	Mandibular left first molar	74
Mandibular right second molar	85	Mandibular left second molar	75

## Examples of Appropriate Notes

**Example 1.** You perform a large filing on a deep carious lesion on the patient's lower right first molar. The anaesthetic you used was 2.0 ml of lignocaine with adrenaline 1:80000. Because the lesion was deep radiographically, you mention to the patient that it may lose vitality, and need endodontics or possibly extraction in the future. An appropriate clinical entry would be

4/5/9 . 46MO Ca(OH)<sub>2</sub> GIC base/ AECR shade A3 Heliomolar 2.0 ml lig/adr 1:80000 IDN block . Deep lesion approaching pulp, patient advised may develop symptoms and require RCT or extraction.

**Example 2.** A patient presents with a decoronated maxillary lateral incisor. Its restorative prognosis is poor. You have discussed several options including a) endodontics, post core and crown b) extraction and denture c) extraction with bridge d) extraction with implant. Your clinical entry would need to include the discussion with your patient about the relative chance of success of each option, associated costs, advantages and disadvantages of each option, and any potential risks. For example, your entry may read

4/5/9 Patient presents with decoronated 22. Minimal remaining tooth structure. Advised poor restorative prognosis. Discussed options as follows:

- a) endo, post core crown . Advised however guarded prognosis and high probability of root fracture. Costs \$2000
- b) extraction and denture. Discussed limitations of dentures. Cost \$1000 including casting fee
- c) extraction and replacement with bridge. Advised not ideal due to intact and unrestored abutments. Costs \$4000+
- d) extraction and replacement with implant. Advised most ideal and durable option. Discussed time frames and Costs \$8000--\$12000 plus a fee to the surgeon.

A brief summary of your discussion of the advantages and disadvantages of each option as it relates to this particular patient is also appropriate.

Obviously, as the case complexity increases, so does the detail of note taking.

To illustrate the importance of adequate and comprehensive notes, assume your patient opted for option "a", despite your preference in this situation for option "b" or "d". You provide treatment to a high standard, but with little tooth structure remaining, the tooth root fractures vertically 6 months later. The patient presents unhappy, claiming your treatment failed prematurely. It is invaluable to then refer to your notes to see that you had outlined all options, made clear that option "a" had a guarded prognosis and that there were better alternatives. If, however, you refer to your notes, and these discussions are not recorded, there is no reliable evidence that such a conversation ever took place. This will make discussions with your patient more difficult. Further, should the patient decided to pursue the matter it will almost impossible to develop an adequate defence.

## Prescription Writing

The following abbreviations are acceptable for use when prescribing medications:

Before food	ac
Twice a day	bd
Gram	g or gm
Intramuscular	im
Intravenous	iv
In the Morning	mane
Milligram	mg
Mixture	mist
Millilitre	ml
Nebuliser	neb
At night	nocte
Ointment	oint
After food	pc
When necessary	prn
Every six hours	q6h
Four times a day	qid
Subcutaneous	s/c
Immediately	stat
Suppository	supp
Suspension	susp
Syrup	syr
Three times per day	tds
Topical	top

Any of the above may also be written out in full.

The following must be written in full:

Chemical names  
Daily  
Ear or eye  
Lotion  
Microgram  
Oral  
Three times weekly and specify which days  
Twice weekly and specify which days  
Units

### Decimal Points

When using decimal points for values of less than one, always place a zero before the decimal point, for example 0.5 ml.

## Record Audit

Griffith University Dental clinic will conduct record audits of its electronic patient management system to ensure compliance with the record guidelines and policy.

Item	Yes	No	N/A
Medical History			
<i>Updated</i>			
<i>Complete</i>			
Treatment Plan			
<i>Present and Complete</i>			
<i>Signed off</i>			
Clinical Notes			
<i>Notes for every contact</i>			
<i>Local Anaesthetic</i>			
<i>Type of procedure (e.g. inf. or block)</i>			
<i>Dose</i>			
<i>Drug used</i>			
<i>Site of Procedure Identified</i>			
<i>Quadrant</i>			
<i>Tooth</i>			
<i>Surface</i>			
<i>Procedural Detail</i>			
<i>Materials used</i>			
<i>Complications</i>			
<i>Preoperative information and warnings documented</i>			
<i>Post operative information and warnings documented</i>			
<i>Discharge</i>			
<i>Plan for next appointment</i>			
<i>Review/Recall</i>			
Fees			
<i>Signed off each appointment</i>			
<i>Charged through each appointment</i>			
<i>Payment Plan (&gt;\$500)</i>			

## Disposal and Retention of Records

The General Retention and Disposal Schedule for Queensland Universities defines the parameters disposal and retention of all University records, including health services.

This document may be accessed at

<http://www.archives.qld.gov.au/downloads/Universities.pdf>

<b>Disposal and Retention of Health Service Records held by Queensland Universities</b>	
<b>Description of Record</b>	<b>Retention and Disposal Action</b>
Appointment Registers	2 yrs after last action
Clinical records – human adults. Records providing evidence of clinical care to an individual or group of adult patients	10 years after last patient service provision or medico-legal action
Clinical records – human minors. Records displaying evidence of clinical care to an individual patient who is a minor	10 years from patient attaining 18 yrs of age <b>AND</b> 10 yrs after last patient service or provision or medico-legal action
Records displaying evidence of clinical care to an individual patient/client with the following notifiable diseases: Hepatitis B Hepatitis C HIV Leprosy Q Fever SARS Syphilis Tuberculosis	85 yrs from patient's date of birth <b>AND</b> 10 yrs after last patient service provision or medico-legal action
Accreditation of the medical/dental practice. Includes licences and permits	5 yrs after licence or permit expires
Agreements with service providers. Includes agreements between the university and service providers specifying ownership of client files	7 yrs after cessation of agreement or last action whichever is later
Research data created in the conduct of a research project including clinical trials	Permanent



## SCREENING AND ASSESSMENT OF PATIENTS

### Purpose:

1. Explain to patient the purpose of today's appointment.
2. Check patient's medical history.
3. Record in the medical history section of patient's notes any significant information and complete the review of systems tab so that high risk individuals are identified.
4. Identify the main reason for seeking dental treatment.
5. Examine the patient's mouth and oral tissues.
6. Discuss with the patient in broad terms their dental needs.
7. Discuss with the patient the differences of being treated by GDP in house or by students (Discuss advantages and disadvantages of both, students and/or GDP – student services are not covered by Private Dental Health Insurance, cost and duration of treatment differences etc).
8. Explain to patient the fee processes at Griffith. In particular, highlight to Queensland Health patients any items they may have to pay for (e.g. crowns, more than one root canal therapy etc) and \$250.00 casting fee for individual partial dentures (per casting.)
9. Refer patient for OPG at Gold Coast Medical Imaging which is bulk billed and there is no direct charge to the patient. (Allow approximately 2 days for pick up by Griffith University before next appointment.)
10. Record in notes section:
  - a) Screening examination (Item 011)
  - b) Patient requests
  - c) Treatment requirements in general terms
  - d) Explanation of fees
  - e) Referral for OPG
  - f) Referral to student/GDP

### Referral Guidelines

***Patients requiring emergency treatment are to be referred to the emergency clinic.***

### ***Guidelines for referring directly to Post Graduate Periodontal Students (DClinDent)***

***Some patients will not be suitable for periodontal treatment by dental students (GradDipDent). The school runs a postgraduate specialist training program in periodontology (DClinDent) and patients with advanced periodontal problems, or those requiring implant treatment, can be referred directly to these students. The type of patients suitable for the program, and the associated costs are as follows:***

1. Moderate to advanced periodontitis – patients with generalised pocketing > 6mm. These patients should be advised that the cost of treatment is in the order of \$150.00 per debridement visit, i.e. \$600.00 for a full mouth debridement by quadrant over 4 visits. If the disease is localized, fewer visits will be required and lower costs will be involved. Detailed costs will be discussed at the time of consultation.

2. Any other periodontal disease requiring specialist periodontics consultation (e.g. aggressive periodontist, mucogingival defects, vertical periodontal defects, non-responsive/severe gingivitis).
3. Implant patients – any patients who are candidates for and interested in implant treatment should be booked in the postgraduate clinic on Thursdays. Costs will be discussed following consultation, but as a general guideline, start from \$3200 for a single tooth.

***Masters in Dental Technology (Prosthetists)***

1. Dentures only. High priority for full dentures.
2. No very complicated medical histories.

***Professional Dentists***

Spiritus patients are to see professional dentists only.

**Note:** Reception staff hold a list of priorities for different students in various years. At times it may be necessary to be flexible with the above guidelines so that these educational priorities can be fulfilled

## Patient Information

### FOR TREATMENT IN GRIFFITH DENTAL CLINIC

Our mission is to provide patient-centred, quality oral health care in a supportive environment. Our faculty members and students collaborate to provide comprehensive dental care, from traditional to cutting-edge dental procedures, at competitive prices.

Our team approach aims to train professionals capable of treating oral health conditions and include technicians, prosthetists, therapists, hygienists and dentists that are educated side-by-side and in collaboration with the Medical School and the Community giving staff and students the opportunity to achieve their fullest potential.

All care is provided by qualified practitioners or dental students, who work in teams under the close supervision of a group leader.

The group leaders are responsible for ensuring the quality and continuity of care that is given to all patients.

#### **What to expect at your initial visits.**

When you become a patient at the Dental Clinic, a professional dentist will review your overall health and will ask you to complete a medical history form.

He/She will ensure that you understand the process for team treatment by students under supervision. If you do not accept the concept, we cannot accept you as a patient.

A screening examination will determine your initial dental needs, and whether the clinic will be able to provide dental services. A screening appointment does not guarantee that you will be accepted as a patient. If we do accept you as a patient, we will schedule you for any necessary x-rays, emergency treatment (if needed) and a scaling and polishing of your teeth.

You will then be assigned to a student team, who will undertake a complete dental examination and work out a specific treatment and financial plan for you.

Throughout your treatment your student team leader will be responsible for your treatment and will coordinate referrals to other members of the team. Your student will explain how the treatment plan will be executed and what role each team member will play in doing so (with your consent).

**What to expect at your next visits**

Following your initial visit, you will receive a call from your student team leader/receptionist, who will schedule an appointment with you to begin your dental care (first visit). We will perform a head and neck exam, oral cancer screening, and conduct a comprehensive oral health examination. If necessary, additional X-rays, clinical photos and study models will be taken.

During your first or second visit an initial treatment plan will be presented to you for approval. This will include emergency treatment (if needed), scaling and polishing of your teeth and basic restorative work.

If you require further treatment a comprehensive treatment plan will be developed and approved by senior faculty members. Different options will be presented to and discussed with you, and finances will be addressed with the clinic financial clerk. Your signature on the final treatment plan of your choice and financial arrangement form will evidence your approval and acceptance of your responsibilities as a patient.

In order to save time, your student team leader, while working on your comprehensive treatment plan, may refer you to one of his student team members who will undertake parts of the treatment plan in order to progress your treatment in a timely fashion.

Once the comprehensive treatment plan is completed and approved, more complicated procedures will be scheduled with members of the team.

We will finish or attempt to finish your planned treatment within a year. If you have advanced treatment planned (like implants), then continuing care will be discussed with you as one of your options.

As we get closer to the end of a year (when your student team leader will qualify and leave) and if your treatment does not look like it will be completed, then a transition plan will be created for you by your student team leader. You will then be assigned to a new student team leader who will complete your treatment using his same team.

**What to expect at your final visit**

You will be provided with advice on the maintenance of your oral health and recall options.

## **Your rights**

### **You are entitled to:**

- Have your dental treatment needs fully explained including the estimated cost, the length of time necessary to complete treatment, the results expected, and a plan for treatment alternatives.
- Inspect your own dental records. Your dental records are confidential and may not be shared or transferred without your consent unless specifically ordered by a court.
- Discuss any concerns with your student, a faculty member, or the Dental School's Clinic Director. If you decide not to seek treatment, the consequences of non-treatment will be explained to you.
- Dental treatment that meets or exceeds the current standards of care for the dental profession.
- Receive treatment in an environment that utilizes appropriate infection control procedures known as universal precautions for the protection of all our patients and personnel.

## **Your Responsibilities**

### **When we accept you as a patient you have the responsibility to:**

- Provide accurate information about your medical and dental conditions.
- Inform us about changes in your medical or dental status.
- Follow our advice.
- Show courtesy and consideration of other patients, the Clinic staff and for the property of others.
- Keep appointments and attend on time.
- Attend for treatment in an appropriate state and conduct yourself with courtesy.
- Tell us if you are unhappy with the care you receive.
- Settle any account before leaving the Centre.
- Accept the consequences of declining recommended treatment and not taking advice.

## **SUPERVISION OF CHILDREN**

There are no childcare facilities available within the Medicine and Oral Health Building. Parents or guardians are responsible for the care and behaviour of their children.

\*\*\*\*\***CLINICAL**\*\*\*\*\***ANTIBIOTIC PROPHYLAXIS****Introduction**

Griffith University Dental Clinic follows the recommendations and guidelines for antibiotic cover for dental procedures, which are published in Therapeutic Guidelines in conjunction with the Australian Dental Association. The information contained within this section is a summary of the information relevant to general dental practice contained within the 2008 update "Prevention of Endocarditis". For more detailed information reference should be made to this document.

**Cardiac Conditions Associated with the Highest Risk of Adverse Outcomes from Endocarditis**

Antibiotic prophylaxis is recommended in patients with the following cardiac conditions if undergoing a specified dental (see Table 1).

- Prosthetic cardiac valve or prosthetic material used for cardiac valve repair
- Previous infective endocarditis
- Congenital heart disease but only if it involves:
  - unrepaired cyanotic defects, including palliative shunts and conduits
  - completely repaired defects with prosthetic material or devices, whether placed by surgery or catheter intervention, during the first 6 months after the procedure (after which the prosthetic material is likely to have been endothelialised)
  - repaired defects with residual defects at or adjacent to the site of a prosthetic patch or device (which inhibit endothelialisation)
- Cardiac transplantation with the subsequent development of cardiac valvulopathy
- Rheumatic heart disease in Indigenous Australians only<sup>3</sup>

All patients with cardiac abnormalities should be reminded to practise good oral hygiene and have regular dental evaluation. In particular, dental examination is recommended twice yearly for patients with cardiac conditions involving the endocardium, especially those with the cardiac conditions involving the endocardium.

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<sup>3</sup> Indigenous Australian patients with rheumatic heart disease may be a special population at high risk for infective endocarditis or for adverse outcomes from endocarditis. A thorough risk assessment of these patients should be undertaken, which also includes their social history and a clinical judgement made as to the necessity for prophylaxis

### Dental Procedures and Endocarditis Prophylaxis in Patients with Conditions Listed Above

#### Prophylaxis

- Extraction
- Subgingival scaling
- Root planing
- Surgical procedures
- Replanting avulsed teeth

#### Prophylaxis in Some Circumstances\*

- Full periodontal probing
- Intraligamentary and intraosseous local anaesthetic injection
- Supragingival calculus removal/cleaning
- Rubber dam placement with clamps if risk of gingival damage
- Restorative matrix band/strip placement
- Endodontics beyond the apical foramen
- Placement of orthodontic bands
- Placement of interdental wedges
- Subgingival placement of retraction cords, antibiotic fibres or antibiotic strips

#### Prophylaxis not Required

- Oral examination
- Infiltration and block local anaesthetic injection
- Restorative dentistry
- Supragingival rubber dam clamping and placement of rubber dam
- Intracanal endodontic procedures
- Removal of sutures
- Impressions and construction of dentures
- Orthodontic bracket placement and adjustment of fixed appliances
- Application of gels
- Intraoral radiographs
- Supragingival plaque removal

\* Consider prophylaxis if multiple procedures are being conducted, the procedure is likely to be prolonged or periodontal disease is present.



**Antibiotic Prophylaxis**

If after careful evaluation of both the cardiac condition and the dental procedure antibiotic prophylaxis is considered necessary, a single dose of antibiotic should be given before the procedure. If a patient is having more than one procedure requiring antibiotic prophylaxis, dentists should carefully consider their treatment plan and modify it as necessary so that all of the procedures can be completed in a few sittings as possible. Generally, third year students should not treat patients requiring antibiotic prophylaxis and these patients should be referred to a 4<sup>th</sup> or 5<sup>th</sup> year student.

**Standard Prophylaxis**

Amoxycillin 2 g (child: 50mg/kg up to 2 g) orally, 1 hour before the procedure

**Prophylaxis in Patients Allergic to Penicillin**

Clindamycin 600mg (child: 15 mg/Kg up to 600 mg) orally 1 hour before the procedure<sup>4</sup>

or

Cephalexin 2 g (child: 50mg/kg up to 2 g) orally 1 hour before the procedure<sup>5</sup>

Patients should be provided with a prescription and advised to take the antibiotics one hour prior to attending appointment. If patient is deemed to be unreliable then the patient should be asked to present one hour prior to appointment and be sighted by the supervising dentist taking the prescribed dose.

This policy has only included approved oral prophylaxis. If intravenous antibiotic prophylaxis or an alternative regime to those above reference should be made to the *Therapeutic Guidelines: Oral and Dental published by Therapeutic Guidelines in conjunction with the Australian Dental Association, Version 13 (2007): Update: "Prevention of Endocarditis" (2008)*

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<sup>4</sup> There is no oral liquid formulation of clindamycin in Australia; therefore the second option must be used for children.

<sup>5</sup> Cephalexin is not suitable for those who have been on long-term penicillin or have taken a related beta-lactam antibiotic more than once in the previous month.

## CHILDREN AND ASPRIN (REYE'S SYNDROME)

**Reye's syndrome** is a potentially fatal disease that causes numerous detrimental effects to many organs, especially the brain and liver. It is associated with aspirin consumption by children with viral diseases such as chickenpox.

The disease causes fatty liver with minimal inflammation, and severe encephalopathy (with swelling of the brain). The liver may become slightly enlarged and firm, and there is a change in the appearance of the kidneys. Jaundice is not usually present.

Early diagnosis is vital, otherwise death or severe brain damage may follow.

### Causes

The precise mechanism by which Reye's syndrome occurs remains unknown. This serious illness is referred to as a "syndrome" because the clinical features that physicians use to diagnose it are quite broad. Many studies have demonstrated a strong association between aspirin taken for viral illnesses and the development of Reye's syndrome.

The Centers for Disease Control and Prevention (CDC), the U.S. Surgeon General, the American Academy of Pediatrics (AAP) and the Food and Drug Administration (FDA) recommend that aspirin and combination products containing aspirin not be given to children under 19 years of age during episodes of fever-causing illnesses. It is advised that the opinion of a doctor or pharmacist be obtained before anyone under 19 years of age is given any medication containing aspirin (also known on some medicine labels as acetylsalicylate, salicylate, acetylsalicylic acid, ASA or salicylic acid). In the United Kingdom by the Committee on Safety of Medicines is that aspirin should not be given to those under the age of 16 years, unless specifically indicated in Kawasaki disease or prevention of blood clot formation.

### Signs and symptoms

Reye's syndrome progresses through five stages, explained below:

- Stage I
  - Persistent, heavy vomiting that is not relieved by eating
  - Generalized lethargy
  - General mental symptoms, e.g. confusion
  - Nightmares
- Stage II
  - Stupor caused by minor brain inflammation
  - Hyperventilation
  - Fatty liver (found by biopsy)
  - Hyperactive reflexes

- Stage III
  - Continuation of Stage I and II symptoms
  - Possible coma
  - Possible cerebral edema
  - Rarely, respiratory arrest
- Stage IV
  - Deepening coma
  - Large pupils with minimal response to light
  - Minimal but still present hepatic dysfunction
- Stage V
  - Very rapid onset following stage IV
  - Deep coma
  - Seizures
  - Respiratory failure
  - Flaccidity
  - Extremely high blood ammonia (above 300mg per 100mL of blood)
  - Death

## **AVULSED TEETH**

### **Procedures for replantation and splinting an avulsed permanent incisor**

1. When the patient arrives, place the tooth in milk, if possible
2. Consider the need for Local Anaesthesia
3. Use a soft tissue curette to remove any coagulated tissue from the socket. Irrigate gently with saline. Do not scrape the alveolar bone to remove any remains of periodontal membrane
4. Rinse the tooth carefully with a flow of saline from a syringe
5. Replace the tooth slowly with gentle finger pressure
6. Check position of the tooth by radiograph
7. Stabilize the tooth with a splint. A piece of flexible stainless steel wire with composite resin can be used.
8. Patient should be instructed to maintain soft diet and soft toothbrush.
9. Allow the sprint to remain in place for 10-14 days. A short splinting time favours both periodontal and pulpal healing, whereas a rigid long-term splinting leads to dental alveolar ankylosis

### **Prognosis for avulsed teeth and successful healing is dependant on**

- Minimum damage of the pulp and periodontal membrane
- The length of the time the avulsed tooth was out of the mouth and how the tooth was stored
- The level of the root formation

### **Avulsion of primary teeth does not require replantation**

# BISPHOSPHONATES AND OSTEONECROSIS OF THE JAW

## Introduction

Bisphosphonates are an important drug in the management of bone diseases, including osteoporosis, Paget's disease and malignancy. Osteonecrosis of the jaws (ONJ) is a rare complication associated with bisphosphonate therapy, which was first reported in 2003. ONJ may follow dental extraction but can be associated with periodontal diseases or poorly fitting dentures. The risk of osteonecrosis of the jaws increases with the duration of bisphosphonate therapy, the potency of bisphosphonate and the total dose. The following table, from a recently published article, differentiates the frequency for various conditions:

## Risk of Osteonecrosis of the Jaws in Patients taking Bisphosphonates<sup>6</sup>

	General Risk (%)	Risk if undergoing extraction (%)
All patients	0.05 – 0.10	0.37 – 0.80
<i>Patients with:</i>		
Osteoporosis	0.01 – 0.04	0.09 – 0.34
Paget's Disease	0.26 – 1.80	2.10 – 13.5
Malignancy	0.88 – 1.15	6.67 – 9.10

The risk increases with increasing age of patient, increasing time of taking the bisphosphonate, and increasing potency of the bisphosphonate. The risk is higher in patients with immunological compromise.

## Management

Determine whether the patient is at higher risk of bisphosphonate-associated osteonecrosis by asking the following questions<sup>7</sup>:

### 1. Do you have any bone disease?

The conditions, which may be treated with bisphosphonates, include:

- Osteoporosis
- Paget's Disease
- Cancer with spread to bone
- Multiple Myeloma
- Other bone conditions

<sup>6</sup> Adapted from Mavrokokki A, Cheng A, Stein B, Goss A. *The Nature and Frequency of Bisphosphonate Associated Osteonecrosis of the Jaws in Australia*. J Oral Maxillofac Surg. 2007; 65:415-423

<sup>7</sup> Excerpt taken from: Therapeutic Guidelines: Oral and Dental published in conjunction with Australian Dental Association. 2007

2. Are you taking any bisphosphonate medications?

The commonly prescribed bisphosphonates are:

- nitrogen-containing bisphosphonates
  - alendronate
  - risedronate
- disodium pamidronate
  - zoledronic acid non-nitrogen-containing bisphosphonates
  - etidronate
  - sodium clodronate
  - tiludronate

If the patient is at risk (a yes to any of the above questions) a detailed discussion with the patient is required to obtain informed consent before extractions or procedures involving bone.

***Patients should not cease bisphosphonate therapy without the consent of their medical practitioner.***

*Low risk:* Patients who are medically well can usually be managed in general dental practice. These patients should have their oral health monitored on a regular basis.

**Students should not proceed with treating these patients without direct supervision by an appropriately qualified dental practitioner.**

*High Risk:* Seriously medically compromised patients on infused doses of bisphosphonates for malignancy are best managed by referral to a specialist who will consult with the oncology team.

## BLOOD BORNE VIRUSES

(Quoted from Griffith University, School of Dentistry and Oral Health, Health Policy, Sections 11.1 to 11.3)

Griffith Net Link: <http://www.griffith.edu.au/health/school-dentistry-oral-health>

### 11.0 Treatment of Blood Borne Infected Patients

Universal precautions, and the high standards of infection control, exist because it is never known for certain whether or not any given patient is carrying a blood borne virus (BBV) or other potential pathogen. All patients are assumed to be potentially infectious.

At the School of Dentistry and Oral Health the Clinical Reference Group, lead by the Clinical Director, have agreed that, provided a BBV positive patient is not cognitively impaired or carrying a potentially dangerous opportunistic pathogen (such as open tuberculosis, for example), they should be treated in the general clinic. This policy has been developed with due consideration of the duty of care to students and the requirement of staff to educate students for their future roles as registered professionals.

Graduates of our clinical programmes, who become registered professionals, will be required to treat such patients in their practices: to refuse to do so is discriminatory and could result in action from the Dental Board of Queensland.

### 11.1 Supporting Policies

#### 11.1.1

Extracted from the Dental Board of Queensland Policy #9 "Dental Practitioners Infected with Blood Borne Viruses"

<http://www.dentalboard.qld.gov.au/publications.htm>

"3.1 The Dental Board insists that all patients are entitled to good standards of practice and care from their Dental Practitioners and other health care workers (including Student Dental Practitioners) regardless of the nature of their disease or conditions.

3.2 Health care workers owe a duty of care to patients and are therefore responsible for the protection of patients against infection.

3.3 Under the general law and the Workplace Health and Safety Act 1995:

- a) An employer has a legal obligation to ensure workplace health and safety of employees, patients and others at the workplace; and
- b) Dental Practitioners as employees, have a legal obligation to comply with employer's reasonable instructions, including instructions for workplace health safety, and not to willfully place at risk the workplace health and safety of any person in the workplace.

3.4 The Queensland *Anti-Discrimination Act 1991* prohibits discrimination on grounds of impairment (which includes the presence of a blood borne virus)."

## 11.1.2

Dental Board of Queensland Infection Control Guidelines

<http://www.dentalboard.qld.gov.au/publications.htm>

## 11.1.3

School of Dentistry and Oral Health Infection Control Procedure Manual

<http://www.griffith.edu.au/school/doh/policiesandprocedures.html>

**11.2 Confidentiality of a Patient's Infectious Status**

If a patient informs in their medical history that they are BBV positive, this is privileged and confidential information. This remains recorded as part of their confidential medical history, and can only be disclosed to another party with the patient's explicit permission.

**11.3 Treatment of BBV Infected Patients by Students***Third Year Dental and Oral Health Therapy Students*

In first semester third year dental students, with limited skills, will not be allocated known BBV positive patients. From 2<sup>nd</sup> semester third year students will be allocated such patients.

*Fourth and Fifth Year Dental Students*

Fourth and fifth year dental students may, and should, treat BBV infected patients.



## CHEMOTHERAPY, RADIOTHERAPY AND TRANSPLANTATION PATIENTS

This is a complex topic and patients should be managed depending on the type of malignancy, the stage of the disease and management such as the following:

**Pre-**chemotherapy/radiotherapy/transplantation

**During** chemotherapy/radiotherapy/transplantation

**Post-**chemotherapy/radiotherapy/transplantation

For more information, please refer to the Therapeutic Guidelines-Dental and Oral.

If you encounter a patient who has had either chemotherapy, radiotherapy or a combination of both or transplantation (organ or haematopoietic stem cell transplantation (HSCT) you must get an Oral Medicine consult before proceeding with any invasive dental treatment. Please refer the Guidelines for Orofacial Mucosal Disease and referral mechanism.

## **DISCIPLINE GUIDELINES**

### **GUIDELINES FOR ENDODONTIC TREATMENT**

Students and Clinic Supervisors please observe the following:

The entire treatment plan for the patient must be completed and signed off - particularly the possible restorative options for the tooth requiring endodontic treatment. Quotes must be given and the patient's permission gained to proceed with the chosen option for that tooth.

At an emergency visit the patient must be informed that the treatment is a temporary pain control only and future possible treatments must be explained to the patient i.e. Root Canal Therapy or Extraction before any further endodontic treatment is undertaken.

#### **Anaesthesia**

- Infiltration anaesthesia with the solution of choice being Lignocaine with Adrenalin.
- In the case of contra-indication for the use of Adrenalin then Citanest with Octapressin or Septanest Plain is the next choice.
- Supplementary anaesthesia
  - The first choice of supplementary anaesthesia is intra-ligamental injection
  - The second choice of supplementary anaesthesia is intra-pulpal
  - Intra-osseous injection is not used in the student clinic.

#### **Isolation**

- All old restorative material must be removed from teeth to have Root Canal Treatment.
  - This will facilitate assessment of remaining tooth structure.
  - Allow better visualization for access preparation.
  - Ensure that there is no coronal micro-leakage under old, patched restorations
- Rubber dam is mandatory.
  - Single tooth isolation is preferable followed by cuff technique (two or three teeth)
  - The tooth should be temporized in such a way as to allow rubber dam placement before any instrumentation with endodontic files is undertaken.
  - If, in extenuating circumstances, it is impossible to apply rubber dam, then floss ties and/or a gauze net at the back of the mouth must be used for all endodontic or other instruments and objects that may be accidentally ingested or inhaled (for instance if there is no remaining coronal structure on the tooth being endodontically treated and there are no suitable surrounding teeth to provide a means for the placement of the dam clamp)

- Disinfection of rubber dam is carried out as a two-step procedure
  - Ensure that the dam is in place and sealed
  - Scrub tooth and surrounds with a large cotton pellet soaked in 3% peroxide
  - Do the majority of removal of the temporary access closure restorative material with high-speed bur and water cooling.
  - Do not completely penetrate the pulp chamber with high-speed
  - Repeat the disinfection process with 3% peroxide followed by swabbing the tooth, clamp and surrounds with chlorhexidine/alcohol solution.(Avagard).
  - Open the pulp chamber with slow speed bur with no water cooling
  - From this point on use only Hypochlorite solution in the pulp chamber and canals
  - Water spray from Triplex syringe and high speed handpiece are to be avoided

### Temporary restorations

- Temporary restorations are to be made with Glass Ionomer Restorative material, particularly if the cavity has any proximal box component or involves more than one surface.
  - Cavit –W is not desirable as its tensile strength is not sufficient for occluso-proximal restoration.
  - Cavit –W has a tendency to wash down over a period of time particularly in occlusal cavities.
  - Both these features may result in a compromised coronal seal.
  - Closure of access cavities in existing temporary restorations should also be made with GIC over a **Cavit – G base**. Cavit – W is not used for the purpose of sealing the canal orifices as it is harder, more difficult to remove and set particles of material may enter the canals potentially causing blockage.
  - Avoid the use of cotton pellets in the access cavity
  - Orthodontic bands may be used to facilitate the placement of a temporary restoration in the case of heavily broken down teeth. The orthodontic bands can be left in place to help reinforce the temporary restoration.

**\* All instruments, needles, files, Lentulo Spirals, paper points or GP points are to be length controlled whenever they are placed into a canal**

## Working length determination

- Pre-operative radiographs should be taken with one parallel view and one tube shift view to assist with visualization of the tooth's three-dimensional shape.
  - Teeth that may demonstrate accessory canals include lower 1,2,3,4,5,6,7 upper 4,5,6
- Establish working length using an Apex Locator, if available, and confirm with radiographs.
- In the case of lower molars with two mesial or distal canals or upper molars exhibiting an accessory mesio-buccal canal, use a K-file and a Hedstroem file in the respective canals and a tube shift view to differentiate canals (Similarly with other teeth displaying accessory canals). If there is difficulty placing all files in the tooth simultaneously, take additional radiographs as necessary.
- In no situation is the final working length to be established by measuring the length on a radiograph, due to the potential for image length distortion on the film. Any working length radiographs must show acceptable proximity of the file to the terminus of the canal on a film (**no more** than 1mm from the apparent radiographic apex of the tooth) and the file subsequently measured upon removal from the canal, to determine the working length.
- A combination of apex locator readings and radiographs may be necessary due to the variability of the apical foramen location with respect to the radiographic apex.

## Chemo-mechanical preparation

### 1. Using Gates-glidden Drills, Hedstrom files and Stainless Steel or Nickel-titanium hand files

- The coronal 2/3 of the canal can be flared with a combination of Gates Glidden burs and Hedstroem files.
- Initial flaring the coronal portion of canal will assist with length determination and subsequent preparation of the canal.
- Filing in the apical 1/3 of the canal is achieved using stainless steel K-files or Ni – Ti, K-files.
  - For the preparation of curved canals – all stainless steel files must be pre-bent or alternatively use Ni-Ti files.
  - Files tips are not to be touched with gloved fingers, rather handled with sterile gauze if bending is required.
  - Narrow and curved canals should be enlarged only to size 25 at the full working length when using steel files.
  - In wider, straight canals, the apical 1/3 of the canal should be gauged for the largest file that fits easily and snugly to full working length without appreciable work and then enlarged three further sizes.

- There will often be extenuating circumstances relating to canal size, curvature and proximity to the furcation. Thus mechanical preparation of the canal should then proceed at the discretion of the supervisor, in order to minimize risk of lateral, apical or furcation perforation, over- or under-instrumentation, ledging of canals and apical transportation.

## 2. Using ProTaper Nickel-titanium hand files

- The ProTaper system of hand files is used according to the manufacturers recommended sequence.

### Irrigation

- “Hypochlor” is the irrigant of choice. [1] It is considered to provide sufficient lubrication during mechanical preparation in most situations.
- EDTA Gel or Paste is only used when there is a specific need, such as in very narrow and calcified canals or when attempting to regain patency in the eventuality of canal blockage.
- Canals are always instrumented when wet with irrigant.
- Irrigation is carried out between each file used, to assist with removing dentine chips and soft tissue debris thereby maintaining canal patency.
- Irrigation should be carried out in such a way as to prevent the extravasation of irrigants into periapical tissues or anatomical spaces.
- Irrigation needles may penetrate to within 2mm of the full working length (no closer) and must not bind in the canals. There must be absolutely no back pressure upon depressing the syringe plunger. The flow of fluid from the canal must be observed at all times during the irrigation procedure.
- Side-cutaway endodontic needles are available for the purpose of irrigation.
- Upon completion of instrumentation the canal is irrigated with EDTA solution and dried. The canal is not irrigated again with Hypochlorite solution again at this point.
- A final irrigation with aqueous chlorhexidine solution can be carried out and the canal dried again. The chlorhexidine is not rinsed from the canal with any other solution. The canal must be free of any hypochlorite solution at this stage to prevent the formation of a brown precipitate. [2, 3]
- Canals should be dried of any remaining chlorhexidine solution, with paper points, prior to placement of medicament or obturation.

## Medicaments

- CaOH is the medicament of choice as an inter-appointment dressing following complete chemo-mechanical canal preparation.
  - CaOH is used in cases of:
    - Chronic apical periodontitis and left until there is evidence of bone healing (reduction in size and preferably elimination of any radiographic peri-apical lucency) - CaOH may be changed monthly and seal of temporary restoration checked.
    - Open apex, to stimulate apexogenesis or apexification.
    - Trauma – when dealing with middle to apical 1/3 root fractures.
    - CaOH should be placed being mindful of the situation. Use hand instrumentation with hand file rotated in the reverse direction (non-cutting) where there is proximity to the maxillary sinus, mandibular nerve canal, in the case of an immature tooth or iatrogenically enlarged apex. Rotary instrumentation (Lentulo spirals) operating at very low rotation speed (set on the operating unit – e.g. 350rpm) may be used where apex is closed and there are no major anatomical structures in proximity to the tooth. The aim is to fill the canal with CaOH or at the very least, completely coat the walls of the canal.
- **Ledermix paste or Endo paste is to be avoided wherever possible particularly in anterior teeth.**
- Odontopaste, a non-staining antibiotic/anti-inflammatory paste, is available as a substitute for Ledermix and will be used to avoid the complication of tooth darkening which is caused by Ledermix Paste.
- Indications for the use of antibiotic/anti-inflammatory root canal medicament
  - If there proves to be insufficient time for a student to carry out complete pulp extirpation, particularly when the pulp is in a hyper-sensitive state and this has prevented complete extirpation, Odontopaste can be used with the aim being to reduce pulp inflammation, facilitating effective anaesthesia at a subsequent appointment thus allowing complete pulp extirpation to be performed.
  - Odontopaste may be used in the case of infected teeth involved with acute localized and/or systemic signs and symptoms and may be used in this situation in conjunction with systemic antibiotic therapy.
  - Ledermix or a 50/50 mix of CaOH and Ledermix may also be an alternative in the case of infected teeth involved with acute localized and/or systemic signs and symptoms and may be used in this situation in conjunction with systemic antibiotic therapy.
  - Ledermix as an intra-canal dressing is thought to be of use in the case of avulsion to help prevent external resorption. [4]

- **Mineral Trioxide Aggregate**

- This material is only to be used in the dedicated Endodontic sessions under the direct supervision of a school appointed Endodontic tutor.
- It can be used in cases of furcation or root perforation and also as a retrograde endodontic restorative material at the discretion of the tutor
- Where such treatment with this material becomes part of a patient treatment plan it must be approved by the Discipline Lead

## **Obturation**

- Progression to obturation must not occur unless a tooth has been dressed with CaOH for at least 1 week, is symptom free, has no clinical signs of inflammation, no radiographic signs of residual chronic bone changes or at the very least has obvious signs of resolution of chronic lesion.
- Canals are to be obturated using the cold lateral condensation technique with Gutta Percha (GP) points and root canal sealer paste (AH-Plus).
- A master GP point is to be chosen to fit the canal. The point is chosen should be the largest sized point that will fit the canal snugly, at the full working length.
- The chosen spreader for lateral condensation can be tried beside the master GP point before any sealer is placed, to ensure that it will penetrate to within 1-2mm of the apical extent of the canal preparation.
- The master point should be confirmed with a radiograph prior to completion of obturation.
- Canal walls should be well coated with sealer and the master point likewise. A finger spreader of a size suitable for the canal is used beside the master point to create space for the insertion of accessory GP points, with sizes 30 & 25 being suitable for most applications.
- Accessory point sizes
  - FF - equates to a size 20 spreader
  - MF - equates to a size 25 spreader
  - F - equates to a size 30 spreader
- The spreader can be pre-bent as required to suit the canal curvature.
- The appropriate spreader and the first accessory point should reach to within 1-2mm of the full working length.
- Subsequent accessory points should be placed to completely obturate the canal.
- The master GP point and 2 or 3 accessory points are to be placed and a check radiograph taken to confirm that there has been no extrusion of GP
- If this is satisfactory then excess GP can be removed with a heated instrument and additional accessory points placed to densely obturate the canal

**\*A final check radiograph should be taken to confirm adequate condensation, before the sealer paster has set, prior to replacement of the temporary restoration at the completion of the appointment.**

### **Antibiotic Therapy during Endodontic Treatment**

**“Therapeutic Guidelines – Oral and Dental”, Therapeutic Guidelines Ltd,** provides a protocol for antibiotic selection based on the severity of the case and any antibiotic sensitivity.

**Antibiotics are not indicated in the following situations:**

- ☐ Irreversible pulpitis.
- ☐ Acute apical periodontitis.
- ☐ Draining sinus tract.
- ☐ To prevent flare-ups.
- ☐ After incision for drainage of localized abscess in an otherwise healthy patient in **absence of:**
  - cellulitis, fever or lymphadenopathy.

### **Pain Control during Endodontic Treatment**

**“Therapeutic Guidelines – Oral and Dental”, Therapeutic Guidelines Ltd,** provides a protocol for the selection of appropriate drugs to be used for control of pain and inflammation.

### **Procedural Accidents**

- **The Use of Hypochlorite Solution** - an incident report should be completed by the Supervisor and student and lodged with the Clinical Director. The Discipline Lead should also be informed as soon as possible. [5, 6]

### **Steps taken to minimise potential complications with sodium hypochlorite**

- Plastic bib to protect patient’s clothing
- Provision of protective eye-wear for both patient and operator
- The use of a sealed rubber dam for isolation of the tooth under treatment
- The use of side exit Luer-Lok needles for root canal irrigation
- Irrigation needle a minimum of 2 mm short of the working length
- Avoidance of wedging the needle into the root canal
- Avoidance of excessive pressure during irrigation



## Emergency management of accidental hypochlorite damage

### Eye injuries

- Irrigate gently with normal saline. If normal saline is insufficient or unavailable, tap water should be used
- Refer for ophthalmology opinion

### Skin injuries

- Wash thoroughly and gently with normal saline or tap water

### Oral mucosa injuries

- Copious rinsing with water
- Analgesia if required
- If visible tissue damage antibiotics to reduce risk of secondary infection
- If any possibility of ingestion or inhalation refer to emergency department

### Inoculation injuries

- Ice/cooling packs to swelling first 24 hours
  - Heat packs subsequently
  - Analgesia
  - Antibiotics to reduce the risk of secondary infection
  - Request advice or management from Maxillofacial Unit
  - Arrange review if to be managed in dental clinic
- 
- **Lateral Perforation** – the tooth should be dressed with CaOH and the tooth temporized. The patient should be told in the presence of the supervisor present at the time. Consult the Discipline Lead as soon as possible after the incident for further action.
  - **Apical perforation and Instrumentation beyond the apex**– The tooth should be dressed with CaOH and the tooth temporized. The patient should be told in the presence of the supervisor present at the time. Consult with the Discipline Lead as soon as possible after the incident for further action.
  - **Extravasation of CaOH into chronic apical periodontitis lesions**– If this has been found to occur, it is generally associated with mild to severe discomfort from the periapical and surrounding tissues. The approach to this should be to provide the patient with oral analgesics and anti-inflammatory medication. The patient should be monitored in 1 week, 1 month and 3 months for healing of the lesion. [7, 8]

- **It is possible for there to be extrusion of CaOH material into an artery and this has much more serious sequelae.** [9] An Incident report should be filled out by supervisor present and the patient referred immediately for emergency medical attention.

**If there is any likelihood that any procedural accidents would precede to litigation then the incident must be documented on the appropriate form.**

### **Endodontic Retreatment**

- The Discipline Lead's approval to undertake re-treatment should be gained.
- The reduced chance of success explained to the patient.[10, 11]
- The patient should sign an agreement indicating that they understand the reduced chance of success
- The patient should be informed that there will be a charge for a temporary restoration, removal of existing root canal filling and interim root canal dressing. There will be no charge for chemo-mechanical preparation and obturation until the success of the treatment is confirmed.
- Technique for Orthograde Retreatment
  - GP can be removed initially with Ni-Ti rotary re-treatment burs. This done without solvent. The rotation speed of the slow speed handpiece must be set to 700 RPM on the dental operating unit.[12]
  - This done under close supervision in the designated Endo Clinic.
  - Remaining GP is removed with solvent (Eucalyptus Oil) and hand files.
  - Final removal of GP can be achieved with paper points.
  - All GP must be removed from all canals of teeth being re-treated.
  - Teeth should **not** be instrumented dry (with no solvent) when using hand files.

### **Surgical (Retrograde) Retreatment [13]**

- for any cases that may require a surgical approach to treatment, the supervising dentist should refer the case to the Discipline Lead and the patient will be referred to the Oral Surgery Lead for consultation

### **Trauma [14-19]**

- Complete medical history and history of Trauma should be gained
- OPG should be available
- Ascertain the apparent extent of involvement of dentition, alveolus and facial skeleton
- In the case of trauma to the facial skeleton and alveolus, the patient should have a consultation with Griffith Dental Clinic in-house Oral and Maxillofacial Surgeon. If this person is not available the patient should be referred to a private Maxillofacial Surgeon or hospital emergency clinic if after hours.

- In the case of dental trauma to anterior teeth only and other complications have been ruled out, the following steps should be taken
  - All involved teeth and neighbouring teeth should be base-line tested for response to palpation/mobility, percussion and sensitivity to cold.
  - Three different PA radiographs should be taken of the affected region with varying vertical angulation. Additional imaging may include a mesial and distal tube shift view, true occlusal view and the patient may also be referred for cone-beam volumetric tomography [20-22]
  - A diagnosis should be arrived at and a treatment plan for the management of the injury developed based on the Classification of the Trauma.

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## GUIDELINES FOR IMPLANTOLOGY

Please note the following about implantology activities at the school:

1. Dental implantology is available at GH1.
2. The costs start from \$3000 for a single restored crown. A definitive cost will be provided at the time of the implant consultation.
3. Initially, all implantology consultation and treatment planning should be carried out in the implantology clinic on Thursdays 8-11 and 12-3 and Fridays 8-11AM. The consultations will be carried out by the DClinDent (Perio) students with periodontics, oral surgery and prosthodontic input, as required.

## GUIDELINES FOR OPERATIVE DENTISTRY

Our mission is to provide patient-centred, quality oral health care in a supportive environment. Our faculty members and students collaborate to provide comprehensive dental care, from traditional to cutting-edge dental procedures, at affordable prices. We treat patients by integrating all phases of dentistry with an emphasis on comprehensive treatment.

### *Clinics*

- Students must arrive on time at clinical sessions and complete the treatment within the allocated time of the session. Treatments not completed within the allocated time for the session will be evaluated a “fail”. This is training in time management and regarded as important. It is also important to allow clinical staff to prepare the clinics and instrumentation in time for the next session.
- Times includes cleaning up the chair, filling out electronic records, logbooks, returning instrument kits, emptying bins etc
- If a procedure cannot be completed 15 minutes before the end of a session, the supervisor must instruct the student to place a temporary dressing and continue during the next appointment.
- Appointments should be limited to 1.5 hours per patient. Longer appointments have to be approved by the tutor (Approvals on paper slip located in the clinic. Paper slips are handed to reception to book patient for longer period.).
- No treatment will be allowed without an approved treatment plan.
- All treatment to be done during the session must be pre-approved by the supervisor.
- No unsupervised treatment will be allowed and will attract disciplinary steps as this is illegal.
- Students must complete all records before approaching the supervisor to sign.
- Supervisors will ONLY SIGN ON THE SAME DAY THE TREATMENT WAS PERFORMED!!
- All clinical examinations must be assessed and approved by clinical supervisors. Students are not allowed to perform any treatments (including prophylaxis and scaling) without an approved treatment plan.
- Supervisors are encouraged to continuously question students about clinical procedures, instrumentation, materials, handling of patients, diagnostic techniques and infection control.

- Students will not be allowed to perform treatment procedures not included in the treatment plan. Such procedures will only be allowed when approved and signed by a supervisor on the treatment plan. Non compliance will attract disciplinary steps as this is illegal.
- It will also be the responsibility of students to ensure that all completed procedures be signed off and charged through in the PMS before the patient leaves the surgery.
- As soon as a treatment plan has been completed for a private patient, a supervisor must approve it; the student must then complete a note for the patient for a follow-up visit after six months. Queensland Health (QH) patients should also be encouraged to return for a follow-up visit. However, it should be explained to them that they will then be treated as private patients.
- The referral of patients to other sections will depend on the treatment plan. In the majority of cases the direct type of restorative procedures will have to be completed first, the patient will then be referred. However, the sequence of treatment procedures will depend on the discretion of the supervisor and the patient's needs but it will be the responsibility of the student to book the patient at the clinical section where the treatment will be performed.
- Students will not be issued with more than one ampoule of local anaesthetic at a time. If the first application has been unsuccessful students may request a second ampoule. After the second ampoule students must request help from a supervisor. Students will not be allowed to administer more than three ampoules per appointment. Students must obtain good anaesthesia before commencing with the treatment (See administrative procedures).
- Infection control is regarded as very important and students are expected to wear disposable gloves, masks and coats at all times. Students must wash their hands before putting on gloves and again before treating the patient as well as every time the student moves away from the patient and touches/handles non-sterile equipment/materials, e.g. collects materials from the store room and returns to the patient.
- Students may not leave the clinical area while wearing the protective clothes. Depending on the procedure, patients must also wear eye protection and a protective bib.

- All injuries, e.g. needle stick, instruments, or burs must be reported to a supervisor on duty. It is of the utmost importance that the correct protocol be followed with such injuries.
- Students are not allowed to sit on the working areas in cubicles and units must be neat and tidy at all times. Instruments must be neatly arranged in the trays and containers of dental materials must be closed.
- Students must complete all records on the PMS before calling a supervisor for the assessment of a procedure.

### ***Treatment Plans***

Simple restorations that will not influence the comprehensive treatment plan may be allowed by the supervisor before the final treatment plan is completed. **A preliminary treatment plan must be entered into the PMS and electronically signed by the supervisor**

Any treatment plan involving any Prosthodontic, Periodontic or Exo treatment must be completed and approved by the specific discipline lead or delegate.

**No restorative work to be undertaken unless prophylaxis, scaling, and oral hygiene instructions have been done. However, restorative work can be done simultaneously with periodontal treatment.**

### ***Clinical Treatment***

In this school we are looking for high quality restorations. This includes the complete replacement of any restoration in case of caries. We do not attach a restoration on an old remaining restoration! Old liners or old cores under crowns have to be removed completely except when they were done within the past 2 years in house and show no caries.

### **Restorative Procedures**

#### **General:**

- **Caries removal** – this should be done conservatively, removing only soft infected dentine and leaving affected dentine.
- **Deep Caries** – deep cavities should have a layer of CaOH liner. Over this should be placed the appropriate GIC liner or base depending on the depth of the cavity.




- **Indirect and Direct Pulp Capping** – Near exposures and vital symptom less teeth or teeth displaying signs of reversible pulpitis, with carious exposures of the pulp, should have a CaOH lining, followed by GIC as for deep cavities. The same applies to mechanical exposures of the pulp. Patients should be warned of the complication and the possible future need for Root Canal Therapy.
- **LEDERMIX CEMENT IS NOT A PREFERRED LINING UNDER ANY CIRCUMSTANCES.**
- **Glass Ionomer linings and bases** – These should be placed before a total etch of the cavity (including the liner/base) and application of bond.
- **TMS pins** to be used only in exceptional cases where sufficient bonding/retention cannot be established and the patient cannot afford prosthetic work. **Note reasons clearly as well as the fact that the patient was informed on the risks and prognosis of the procedure.** Get approval and help from the supervisor.
- Only small composites restoration (1 or 2 surfaces) in posterior teeth is allowed, but *buccal* composite restorations are allowed in all teeth. We do not offer large composite restorations in the posterior teeth. In case the patient is asking for composite we offer ceramic inlays/onlays only.
- When placing ***composites and for the removal of amalgam always use rubber dam.***
- GIC as permanent restoration is only allowed on buccal surfaces (Class V cavity).
- GIC may be used as a lining material.
- Any temporary restoration should be done with core paste or with Fuji 9.
- We never offer composite veneers but we do offer ceramic veneers.

### **Anaesthesia**

- Infiltration anaesthesia with the solution of choice being Lignocaine with Adrenalin.
- In the case of contra-indication for the use of Adrenalin then Septanest Plain is the next choice.

**PROCEDURES AND ASSESSMENT:****CRITERIA FOR THE ASSESSMENT OF CLINICAL PROCEDURES****CLINICAL EXAMINATIONS ON PATIENTS**

- Radiographs, bitewings, periapical, panoramic radiographs must be available when the student presents the examination to the supervisor.
- In presenting an examination the correct procedure should be followed by the student:  
Introduce patient to supervisor  
Main complaint  
Medical history/dental history  
  
Extra-oral examination  
Intra-oral examination        
Hard tissues
- After the supervisor has signed the treatment plan, the student then transfers the information to the PMS system.
- The student and supervisor explain and discuss the treatment plan with patient, a follow-up visit and the patient (parent or guardian) then signs the file record and the financial consent form.

**Criteria for the allocation of a failed competency**

The following will be regarded as unsatisfactory and evaluated as such:

- Not presenting the examination in the correct manner, e.g. only refer to hard tissue problems and ignoring the other components of the examination.
- Medical history not recorded.
- Swollen lymph nodes not identified.
- Soft tissue lesions not identified.
- Buccal/lingual erosion lesions not identified.
- Large occlusal lesions not identified
- Interproximal lesions not identified on radiographs.
- Impacted wisdom teeth not identified.
- Edentulous areas not identified.
- Malocclusions or ill-positioned teeth not recorded.
- Missing deciduous or permanent teeth not identified.

- The presence of deciduous teeth in adults not identified
- Pronounced abnormalities on panoramic radiograph not observed.
- Periapical lesions not identified on radiographs.
- Periodontal problems (mobile teeth, bone loss, etc.) not identified.

## **PATIENT MOTIVATION AND ORAL HYGIENE INSTRUCTIONS**

Because of communication problems the effectiveness of patient motivation is difficult to evaluate. This procedure will therefore just be signed off by the supervisor and not assessed.

## **PROPHYLAXIS AND SCALING**

This procedure may be completed during the same session as the examination. This procedure may be performed with either hand or mechanical scalers.

### **Criteria for the allocation of a failed competency**

The following will be regarded as unsatisfactory and evaluated as such:

- Supragingival calculus not completely removed.
- Plaque not completely removed.

## **TOPICAL FLUORIDE TREATMENT**

The application of topical fluoride is also not assessed and only signed off. This procedure is usually performed during the same session as the examination.

The application of Duraphat to sensitive tooth necks is also regarded as topical fluoride treatment.

## **CARIES TREATMENT/EMERGENCY TREATMENT/DIRECT PULP CAPPING**

### **Caries Treatment**

- Caries treatment should only be done on teeth with a Class II pulpal status and teeth with extremely deep carious lesions.
- The history of the tooth, and a periapical radiograph must be taken as well as vitality tests must be done. The tooth is then classified.

- All infected decay must be removed from the cavity walls. The affected layer (demineralised, non-infected layer) on the pulpal floor is **not** removed.
- Calcium hydroxide followed by a restoration of IRM, resin-modified glass ionomer or amalgam is placed. The procedure is then evaluated and signed.
- The pulpal status is assessed after three months.
- If the tooth has been symptom free during the three month period and it is possible to ascertain the pulpal status by means of vitality tests, then the tooth is anaesthetised and the restoration/calcium hydroxide is removed plus any remaining caries and the tooth restored.
- If the vitality tests are not conclusive then the temporary restoration and calcium hydroxide is carefully removed **without** giving a local anaesthetic (test cavity). If the patient feels pain when the dentine is reached it should indicate that the pulp is vital. If no pain is experienced then a Class IV asymptomatic pulp may have developed which will require Endodontic treatment.

### **Direct pulp capping**

- Direct pulp capping is done as a result of a traumatic exposure of a Class I pulp through clean hard dentine or the last layer of affected dentine. Direct pulp capping is never done through caries.
- The tooth is isolated and saliva contamination avoided.
- Calcium hydroxide is placed on the exposure, and the cavity is sealed using ZOE cement, e.g. Kalzinol or IRM. The procedure is then evaluated and signed.
- After 6 weeks – in the event of a Class I pulp, the temporary restoration is removed and a permanent restoration placed.
- The cavity, liner and restoration are evaluated under the permanent restorations.

### **Emergency treatment**

- The following procedures are regarded as emergency treatments:  
Splinting of teeth  
Emergency root canal treatment

Temporary restoration (not enough time to prepare a cavity and place a permanent restoration)

Duraphat treatment of sensitive dentine.

- These emergency treatment procedures are not evaluated they are only signed off.

## **FISSURE SEALANTS**

- Fissure sealing is restricted to one quadrant at a time.
- Teeth that are present in the oral cavity for more than five years after eruption do not require fissure sealing.
- Teeth must be isolated with rubber dam where possible.

### **Criteria for the allocation of a failed competency**

- The fissure sealant is detached on probing.
- The fissures not completely covered with sealant.
- Fissure sealants with defects, e.g. air bubbles.
- Fissure sealants with high occlusal spots.

## **AMALGAM RESTORATIONS**

- Amalgam restorations are one of the multi-step procedures; each step must be assessed and signed before a student may proceed with the next step.
- The matrix band/wedge/matrix holder assembly must be of the correct gingivo-occlusal width and the contact/contour must be correct before the student can proceed.
- The tooth and tooth surfaces involved must be clearly indicated in the designated column in the record book. The number of points to be entered in the point's column is equivalent to the number of surfaces (see attached schedule).
- The following criteria regarding cavity preparation, lining, matrix band and restoration are applicable:

### **Cavity Preparation**

The minimal amount of tooth substance is removed.

Caries is completely removed.

The basic principles of cavity preparation are evident: convenience form, resistance form and retention form.

The occlusal aspect has its own retention.

The proximal box has its own retention and the contact is broken buccally, lingually and gingivally.

### **Lining (base)**

The correct lining material is placed.

Lining must only cover the pulpal floor and axial wall(s).

### **Existing restorations adjacent to the prepared/lined cavity**

Polish the exposed surfaces with fine Soflex discs.

### **Matrix Band**

The correctly shaped matrix band with the correct gingivo-occlusal width is selected.

The band must extend beyond the gingival step but not injure the gingival tissue.

The band must extend 1½ - 2 mm beyond the occlusal aspect of the preparation.

The band must be burnished to give the correct contact, and contour interproximally.

The band must be correctly wedged.

### **Restoration**

Restorations must be sufficiently condensed, and carved to the correct anatomy and occlusion.

Contact points must be tight – check with dental floss.

**Criteria for the allocation of a failed competency****Cavity preparation**

- Decay not completely removed.
- Traumatic pulpal exposure.
- Incorrect cavity design, e.g. non-retentive, contact not broken, under or over extension of cavity, incorrect depth.
- Traumatic injuries to soft tissues or adjacent teeth.

**Lining and matrix band**

- Incorrect placement of the lining material.
- Incorrect lining material.
- Incorrect matrix band.
- Matrix band incorrectly placed.
- Matrix band not wedged.

**Restoration**

- Poor occlusal anatomy.
- Occlusal interferences.
- Open contact (dental floss).
- Overhang (dental floss).

**PREVENTIVE RESIN RESTORATIONS**

- All preventive resin restorations must be placed under rubber dam isolation.
- The PRR I to III are placed when minimal caries is present.
- Students must know the difference between the different types of preventive restorations and will be questioned by supervisors before preparations are approved.
- The preparation and restoration are evaluated and signed separately.

**Criteria for the allocation of a failed competency**

- Rubber dam not in position.

- Over extension of preparation.
- Restoration detached on probing.
- Occlusal interferences.
- Open dentine bonding agent bottle.

## **COMPOSITE RESTORATIONS**

- Composite restorations are one of the multi-step procedures and each step must be assessed, and signed before a student may proceed to the next step.
- Where possible all composite restorations should be placed under rubber dam isolation.
- The tooth and tooth surfaces involved must be clearly indicated in the designated column in the record book.

## **THE FOLLOWING CRITERIA REGARDING CAVITY PREPARATION, LINING, MATRIX BAND AND RESTORATION ARE APPLICABLE:**

### **Cavity Preparation**

A minimal amount of tooth structure is removed.

Caries is completely removed.

Bevels and/or chamfers are correctly placed.

### **Lining/Base**

Ca(OH)<sub>2</sub> followed by a resin-modified glass ionomer is placed only in very deep cavities.

No liner is placed when the total etch technique is used.

### **Matrix Band**

Thin stainless steel (for Class II cavities) or transparent (for Class III and IV cavities) matrix bands are used.

Matrix bands must be correctly wedged. Ensure that the correct contact and contour is achieved.



## **Restoration**

Restorative materials, known as tooth coloured restorative materials include resin-modified glass ionomers, compomers and composites. Before cavity preparation the correct shade must be selected.

Restorations must be placed in increments and cured for the prescribed time per area.

To ensure proper bonding dentine/enamel-bonding agents must be placed according to manufacturer's instructions.

All resin restorations must be finished and polished. Polishing must be done according to manufacturer's instructions. Polishing pastes should only be used with the correct instruments and according to the correct procedure. A gloss/glaze/bonding agent is then applied and cured. The aim of the finishing and polishing procedure is to correct the contour, anatomy and occlusion and to create a smooth surface to reduce plaque accumulation and to improve the aesthetics of the restored tooth.

## **Criteria for the allocation of a failed competency**

### **Cavity preparation**

- Decay not completely removed.
- Traumatic pulpal exposure.
- Incorrect cavity preparation (occlusal bevels, bevel gingival step, over extension).
- Traumatic injuries to soft tissues or adjacent teeth.

### **Lining and matrix band**

- Incorrect lining material.
- Incorrect placement of lining material.
- Incorrect matrix band.
- Matrix band incorrectly placed.
- Matrix band not wedged.

**Restoration**

- Placement of the restoration without rubber dam.
- Occlusal interferences.
- Poor occlusal anatomy.
- Incorrect shade selection.
- Incorrect tooth contour.
- Open contact (dental floss).
- Overhang (dental floss).

**RESTORATIVE MATERIALS:****The following brands of products are available in the clinic:**

At the beginning of the clinical dental career students are more likely overloaded with information in the clinics. Therefore we try use only a limited number of materials within the clinics. We teach and practice evidence base dentistry. We also try to find “student-friendly” materials which might tolerate mistakes in handling by the students.

Information sheets (user’s manuals) on all materials are available from the senior DA on request.

- **Lining materials:**

- ***Vitrebond*** – Light cured Glass Ionomer Cement
- Procedure – condition cavity (polyacrylic acid or weak phosphoric acid) – place lining and cure for 40 seconds.
- ***Dycal*** - Calcium Hydroxide – self curing.

- **Base materials:**

- Fuji 2 LC*** – Dual cured, resin-modified Glass Ionomer Cement (GIC)

- Fuji 9*** – Chemical set Glass Ionomer Cement (not light cured)

- Procedure for GIC Base:***

Condition cavity – place base using the preferred GIC material (over Dycal if deep)

- **Intermediate Restorative Material (IRM), Procedure**
  - Place Dycal lining if required followed by IRM base. Note that due to Eugenol content, IRM should not be used when the proposed restorative material is composite resin or composite resin is used for cementing ceramic Inlay/Onlay. Eugenol is known to inhibit the setting of composite resin. In these circumstances GIC is indicated.

### **Restorative materials:**

- **Composite:**
- Premise Unidose procedure  
Place lining if required (GIC to cover dentine), apply bond as instructed below and light cure. Apply composite in small increments, placing the increments in wedges against alternate cavity walls and cure for 20 sec per increment. Transparent matrices and wedges, if available, should be used for both anterior teeth and posterior teeth. Cure through the tooth if possible.

- **Composite Bond**

The bond available in the clinic is **Optibond all in One**

This bond is Technique Sensitive and its success depends on correct application. Please read the instructions!

#### ***Procedure***

- The bond applied to a moist cavity.
  - Blot with cotton pellets or dry very lightly with air to leave the surface slightly moist.
  - Apply a layer of Optibond by rubbing the bonding agent to the tooth surface for 20 seconds with the applicator.
  - Apply a second layer as described above.
  - Cure the bond for 10 seconds
  - Apply composite resin restorative material as described above.

### **Cements:**

In general we use phosphate cement.

For ceramic restorations we have different options:

- Variolink II

- Fuji Plus
- Please read manuals prior to use!

**Core Material:**

- Core paste, a very fast self curing resin bonded composite with high strength stability.
- Procedures: etch cavity, apply bonding, and fill up cavity. After hardened (< 30 seconds) use red ring diamond to reshape restoration.

**Miscellaneous**

- Before signing off records and logbook, please always check if charts are completed, notes have been completed, fees have been charged through and treatment plan and financial consent is recorded (see above).
  - Students will manage their own appointments times with the receptionist and every effort will be made for the student to have the same tutor each week if the appoint is on the same day of the week.
  - Tutors should supervise the same students each time.
  - All mobile phones (staff, students and patients) should be switched off
  - Students bring patient to front desk after appointment and after electronic signature by tutor.

**Grounds for Failure**

Students should automatically receive an unsatisfactory mark (note in logbook) for the clinic session for any of the following:

- Arriving late (10 min and more).
- Finishing late (15 min and more).
- Working unsupervised.
- Consent for care and financial arrangement not obtained from patient.
- Breaching infection control precautions.
- Rudeness to staff, patients or other students.
- Breach of Griffith and School Policies and Procedures and in particular the dress code.

**Note: Students will be immediately excluded from the clinic should they not comply with the dress code**

If there are any questions, please contact:

Prof. TG Oberholzer

Phone: 07-567 80759

Room: 7.25 GH.1

e-mail: [t.oberholzer@griffith.edu.au](mailto:t.oberholzer@griffith.edu.au)

## GUIDELINES FOR ORAL SURGERY

### Introduction

These guidelines are written to provide information to clinicians, students and dental health care workers on the procedures to be followed in case of treating patients requiring oral surgery at the Griffith University Dental Clinic.

### General Protocols

All oral surgery procedures need to be performed in the oral surgery clinic, under the supervision of the discipline lead in Oral Surgery, or his delegate. Procedures must also have been approved beforehand. The only exceptions to this protocol are:

- Simple, uncomplicated extractions – these may be performed under the direct supervision of the supervisor on duty for that session. The student and supervisor must feel confident performing the procedure, and should be able to manage any complications that may arise e.g. crown fracture, retained roots, soft tissue injury. If in doubt, refer the patient to the oral surgery clinic.
- Emergency procedures e.g. severe pain, failed endodontic procedure, crown fracture etc. – these procedures may need to be performed by the supervisor on duty if the student is not competent enough to work independently.

Patients with a complicated medical history or patients on multiple medications are regarded as complex patients and should be referred for elective treatment in the oral surgery clinic. Between the initial consultation and the oral surgery appointment, it may be necessary for the student to obtain further information (via referral letter) from the patient's medical practitioner.

When calling an oral surgery supervisor to assess your patient, ensure that the light on your dental chair is working and that there is adequate suction (surgical suction tip, and not a saliva ejector). The instrument tray may only contain an intraoral mirror, a dental probe and a pair of tweezers. You may also have some clean gauze on the tray. There should be no other instruments, or blood soaked pieces of gauze on the tray. Instruments must also be laid out in a neat and logical manner.

Year 4 students may not perform minor oral surgical procedures (e.g. surgical removal of retained roots). These must be passed on to a Year 5 student.

Students may not extract/surgically remove third molar teeth under any circumstances.

Proper local anaesthetic technique and strict adherence to infection control protocols will be monitored at all times. Students must also dispose of all sharps in a safe manner at the end of the procedure. Sharps (scalpel blades, local anaesthetic syringe needles and suture needles) must not be left for the dental assistants to clear up.

All minor oral surgical procedures must be approved by the discipline lead or his delegate, and must be booked for the oral surgery clinic. Patients may be referred for advanced oral surgical procedures (removal of impacted teeth, apicectomies, biopsies, implants etc.) to the oral surgery clinic. See the section INTERNAL SPECIALITY REFERRAL, Maxillo-facial Surgery for details.

All needle stick injuries must be reported to staff immediately. The same holds true for bent, broken or damaged instruments.

## **Specific Protocols**

### **Prescription Writing:**

Follow the guidelines listed on pages 5-12 of the book Therapeutic Guidelines Oral and Dental 2007 Version 1. Prescriptions should also adhere to the recommendations listed by Medicare Australia (<http://www.medicareaustralia.gov.au/provider/pbs/education/pbs-and-you-manual/writing.jsp>).

You should be able to write a complete, legal prescription on a blank piece of paper.

Always ensure correct drug usage and the proper prescription thereof (correct spelling, doses, method of administration etc.). Also computer workstations in the clinic should have access to the eMIMS – please use it.

### **Medically Compromised Patients:**

Refer to the guidelines set out elsewhere in this manual.

### **Sectional Removal Of Teeth:**

Occasionally, it may be necessary to “split and separate” the root of teeth, without raising a full thickness mucoperiosteal flap. In this instance you may use the electric motor on the dental chair with normal water as a coolant. Make sure that the electric motor is set to 40,000rpm and that the air on the handpiece is switched off. You are still obliged to use a surgical handpiece and a surgical bur (number 8 round bur, 701 or 702 tapered fissure burs).

Under no circumstances must air be used as a coolant in conjunction with water. Nor may you use a non-surgical handpiece (e.g. a turbine or fast handpiece) or a non-surgical bur (e.g. a diamond bur) to section teeth.

### **Dry Socket:**

Administer local anaesthetic.

Wash out the socket using saline in the plastic syringe available in the clinic for this purpose. Do not use the triplex syringe to wash out the socket and do not blow air into the socket.

Stubborn granulation tissue and debris in the socket may be removed by gentle curettage. This may also be performed to encourage bleeding. No aggressive curettage or burnishing of the bone must be performed at all.

Gently pack the socket well with Alvogyl®.

Antibiotics should not be prescribed for a dry socket – only analgesics and a mouthwash.

**Instrument Tray Setup For Minor Oral Surgery:**

When surgically removing a tooth, ensure that the following instruments are laid out on your instrument table in the appropriate fashion:

- Intraoral mirror.
- Dental probe/periodontal probe.
- Scalpel holder and a number 15 scalpel blade.
- Mucoperiosteal elevator.
- Surgical handpiece (already on the surgical unit) with a selection of the following three surgical burs: Number 8 round bur, 701 and 702 tapered fissure burs.
- 3mm and 5mm (Bein) root elevators).
- Left and Right Warwick James elevators.
- Artery forceps.
- Adson tissue forceps (for suturing).
- Needle holder with gold handles (for suturing). The artery forceps must not be used for suturing.
- Suture scissors.
- Suture material (4.0 Plain or 4.0 Vicryl®).

There should be no extraction forceps placed on the surgical instrument tray. Extraction forceps and any additional instruments that you may require should be placed on a separate instrument tray.



## **GUIDELINES FOR OROFACIAL MUCOSAL DISEASES IN GENERAL DENTISTRY**

### **Description**

These guidelines are written to provide information to clinicians, students and dental health care workers on the procedures to be followed in case of a patient presenting with an orofacial disease (Appendix A) at the Griffith University Dental Clinic. One must refer to this document and adhere to the procedures, depending on the individual case which will ensure the highest quality of patient care and meet with Griffith University Dental Clinic Patient Records legal requirements. Students are expected to become familiar with these guidelines and to practice in accordance with the policies and procedures.

### **Introduction**

Oral Medicine is defined as “the specialty of dentistry concerned with the oral health care of patients with chronic recurrent and medically related disorders of the oral and maxillofacial region, and with their diagnosis and non-surgical management. It is also concerned with the investigation of the pathogenesis of these disorders leading to understanding, which may be translated, into clinical practice” (British Society for Oral Medicine).

### **Protocol**

If a student and/or clinician encounter a patient presenting with and/or detect an orofacial lesion, suspect an orofacial complication of a systemic disease during routine examination, he or she must follow the following initial steps.

### **Procedures**

#### **A. Take a comprehensive history on the specific problem or finding as follows:**

- Chief complain
- History of presenting illness/complain
- Medical and dental history
- Drug history
- Social and Family history
- Allergies
- Dietary habits
- Smoking history and other recreational drug habits, if any and only if appropriate
- Alcohol consumption

#### **B. Examination of the patient**

- Extra-oral examination including exposed skin surfaces such as the hands, nails, feet and head and neck
- Intra-oral examination and record your findings in TITANIUM according to the “Oral mucosal findings chart” (Appendix B)

### C. On-call Oral Medicine specialist or Oral Physician

Please refer to the 'On-call Roster' available at the clinic for the "Oral Medicine specialist".

Once you identify the name of the specialist, you may contact him/her by phone, introduce yourself brief about the patient and check for his/her availability. As part of 'learning and teaching', the specialist may offer a consultation at once depending on his/her availability and other commitments.

Once the student made the call and if he/she expects the specialist the students must be prepared to present the case to the specialist as follows:

**Step 1:** Address the clinician with respect (Professor/Doctor) while thanking him/her

**Step 2:** Introduce the specialist and explain to the patient why the specialist has made a visit

**Step 3:** While standing, facing the patient, the student is expected to present the case orally to the specialist as follows:

1. Full name of the patient
2. Date of Birth of the patient
3. Chief complain (irrespective of the orofacial disease) in patient's own words
4. History of the presenting illness/relevant to the suspected orofacial disease
5. Full medical history including a brief dental history
6. Medical alerts (bleeding disorders, antibiotic cover, h/o bacterial endocarditis, for example)
7. Names of medications the patient is currently taking and in the recent past with dosages if known (refer to the MIMS to identify the type/class of drug)
8. Brief the social (occupation) and family (with details such as history of cancer) history
9. Known allergies to medications, substances and other
10. Diet, especially balanced diet on a daily basis
11. If smoker, how many cigarettes per day for how long. If stopped, when? How many years of smoking history in the past with number of cigarettes per day?
12. If consumes alcohol, type of drink and units per day or week. History of recreational drugs only if you think it is absolutely necessary to rule of the oral condition you are presented with!
13. Explain the extra-oral findings including skin, hands, head, scalp and neck
14. Explain the intra-oral findings according to the oral mucosal findings chart using pathological terms
15. Explain the results of investigations (radiographs, blood results for example), if any
16. Briefly explain the differential diagnoses with justifications for each
17. Briefly explain the management strategies including investigations such as haematological evaluation, biopsy, ultrasound, for example
18. Specialist may either proceed with specific management at this stage or may request the student to refer the patient to Oral Medicine Clinic (see below)

## **Referral to Oral Medicine Clinic**

Please follow the following steps if a student and/or clinician encounter a patient presenting with and/or detect an orofacial lesion, suspect an orofacial complication of a systemic disease during routine examination and would like to refer the patient to Oral Medicine Clinic.

Step 1: Once the student has the approval from the tutor, inform the patient about the need for referral and explain why

Step 2: Inform the patient about the fees (Dental Clinic Reception staff will be able to provide more information)

Step 3: Write a letter to Oral Medicine Clinic according to the template (Appendix C)

Step 4: Complete the patient notes and attach the copy of the referral letter in TITANIUM

## **Referral for a Soft Tissue Biopsy**

Please follow the following steps if a student and/or clinician encounter a patient who require a biopsy of soft tissue

Step 1: Once the student has the approval from the tutor, inform the patient about the need for a biopsy

Step 2: Inform the patient about the fees (Dental Clinic Reception staff will be able to provide more information)

Step 3: Write a letter to Oral Medicine Clinic according to the template (Appendix C)

Step 4: Complete the patient notes and attach the copy of the referral letter in TITANIUM

## Care after your extraction

### WHAT TO EXPECT

- Take it easy, rest and sleep with your head raised and place a towel over the pillow.
- If you have any discomfort please take the analgesics recommended by your dentist. Avoid taking prescribed tablets on an empty stomach, and follow instructions on the reverse side of packet...
- Some swelling may occur after your extraction. This usually resolves within 48 – 72 hours to disappear completely. **Please contact us if you have any concerns.** Any swelling can be reduced by using an ice – pack for 20 minutes, then off for 20 minutes and repeat, when you arrive home. Do not commence until the numbness has work off.

### DON'T

- Be careful not to bite your lip, cheek or tongue when they are numb.
- Avoid hot, cold and acidic foods and liquids as they may cause discomfort, follow a soft diet.
- Avoid alcohol and **do not smoke.**
- No vigorous activity – avoid sport until the following day. Increased heart rate increases blood flow which may induce bleeding.
- **Do not** rinse your mouth on the same day as the extraction as the blood clots may be disturbed and start bleeding.
- If stitches are in place, avoid touching. If soluble, most will fall out within 7 -10 days. Silk sutures require removing 7 -10 days after placement, and will require another appointment.

### DO

- Do complete entire course of antibiotics **if** prescribed and take analgesics as required.
- **Following morning:** use warm salty water to rinse. 1tsp salt diluted in a cup of warm water. Rinse after eating.
- Do resume tooth brushing as soon as comfortable.

### COMPLICATIONS

- **Bleeding**  
If bleeding starts, fold gauze or clean handkerchief (not tissues) into a pad and place over the wound, then bite firmly for 30 minutes. Streaks of blood in saliva are quite normal for several days after extractions.

### Specific Instructions:

Your clinician is \_\_\_\_\_ Your surgery was performed on \_\_\_\_\_

Your next appointment is on \_\_\_\_\_ At \_\_\_\_\_

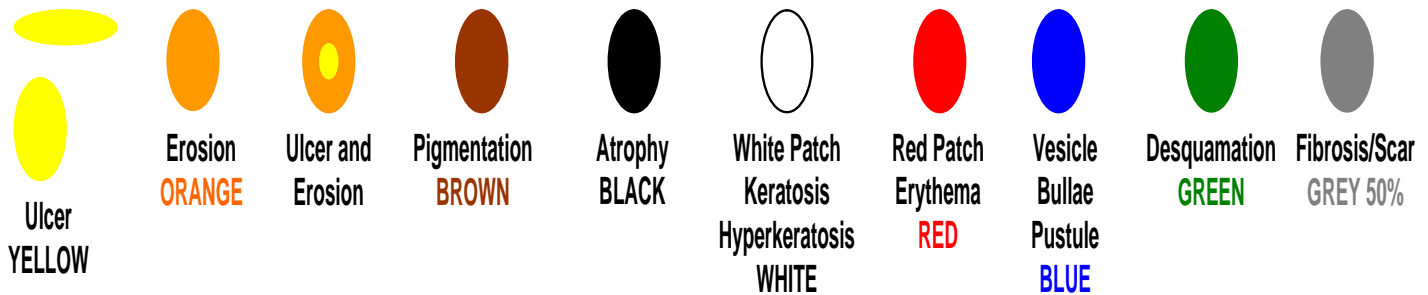
**If you have any problems, please contact the Dental Clinic, Griffith University, School of Dentistry and Oral Health, High Street, Southport.**

**PHONE: (07) 5678 0220**

## Appendix A Scope of Oral Medicine Clinic

ULCER, BLISTERS	WHITE, RED, BLACK, BROWN and BLUISH LESIONS	SALIVARY COMPLAINTS	OROFACIAL PAIN	TASTE DISORDERS  OROFACIAL MOVEMENT AND SENSATION	INFECTIVE DISEASES	CERVICAL LYMPH- ADENOPATHY	DRUG-INDUCED
<b>Haematological/vascular:</b> E.g. Anaemia, Leukopenia, Leukaemia, Giant cell arteritis, Multiple myeloma	<b>Leukoplakia</b> <b>Erythroplasia</b>	<b>Xerostomia</b> E.g. Sjögrens, Radiation-induced	<b>Trigeminal neuralgia</b>	<b>Oral dysaesthesia</b>	<b>Bacterial</b>	<b>Infections</b>	<b>Ulcer</b>
<b>Immunologically-mediated:</b> E.g. Recurrent Aphthous Stomatitis (Major, Minor, Herpetiform), Behçet's	<b>Mucositis</b> E.g. Bone marrow/Stem cell transplantation	<b>Sialosis</b>	<b>Tempromandibular joint pain dysfunction</b>	<b>Neuropathies</b>	<b>Viral</b>	<b>Investigations for malignancy</b>	<b>Lichenoid reactions</b>
<b>Dermatologica/Auto-immune:</b> E.g. Erosive lichen planus, Erythema multiforme, Pemphigus, Pemphigoid, Dermatitis herpetiforme, Linear IgA disease	<b>Infections</b>	<b>Sialadenitis</b>	<b>Atypical facial pain</b>	<b>Burning Mouth Syndrome</b>	<b>Fungal</b>	<b>Other</b>	<b>Other</b>
<b>Gastrointestinal:</b> E.g. Coeliac disease (GSE) Oro-facial granulomatosis/Crohn, Ulcerative colitis	<b>Pigmentation:</b> E.g. Addisonian	<b>Sialorrhoea</b>	<b>Other</b>	<b>Halitosis</b>	<b>Other</b>		
<b>Infections:</b> E.g. Herpes simplex, HIV, Coxsackie, EBV, CMV	<b>Other:</b> E.g. Early detection and referral of potentially-malignant oral mucosal lesions	<b>Other</b>		<b>Facial palsy</b>			
<b>Connective tissue:</b> Lupus erythematosus, Scleroderma <b>Other:</b> E.g. Trauma, Neoplasms, HIV disease, Wegner's granulomatosis. drugs				<b>Other</b>			
<b>Investigations:</b>	<b>Body weight, PR, BP</b>	<b>X-ray, CT scan, MRI</b>	<b>Sialometry, Sialography, Scintigraphy</b>		<b>Biopsy (incisional and excisional) for Histopath, PAS and Immunofluorescence</b>		
	<b>Routine and special haematology and biochemistry</b>			<b>Immunology</b>	<b>Microbiology</b>		

## Appendix B Oral Mucosal Findings Chart      Oral Mucosal Findings – Pathology Chart



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### DEFINITIONS

**ULCER:** A lesion characterized by loss of the surface epithelium and frequently some of the underlying connective tissue. It often appears depressed or excavated. The floor is usually covered by a yellow fibino-purulent slough.

**EROSION:** A superficial lesion, often arising secondary to rupture of a vesicle or bulla that is characterized by partial or total loss of the surface epithelium

**FISSURE:** A narrow slit-like ulceration or groove

**DESQUAMATION:** A very superficial epithelial denuding not classified as erosion.

**ATROPHY:** A wasting away of normally developed tissues or organs due to degeneration of cells

**PIGMENTATION:** Any lesion or condition that is neither white nor red in colour

**CYST:** A pathologic epithelium-lined cavity, often filled with liquid or semi-solid content

**VESICLE:** A superficial blister, 5 mm or less in diameter usually filled with clear fluid

**BULLA:** A large blister, greater than 5 mm in diameter

**PAPULE:** A solid raised lesion which is less than 5 mm in diameter

**MACULE:** A focal area of colour change which is not elevated or depressed in relation to its surroundings

**PUSTULE:** A blister filled with purulent exudate

**NODULE:** A solid raised lesion which is greater than 5 mm in diameter

**PETECHIA:** A round pinpoint area of haemorrhage

**ECHCHYMOSIS:** A non-elevated area of haemorrhage, larger than petechia

**TALENGIECTASIA:** A vascular lesion caused by dilatation of small superficial blood vessels

**SESSILE:** Describing a growth (tumour) whose base is the widest part of the lesion

**PEDUNCULATED:** Describing a growth (tumour) whose base is narrower than the widest part of the lesion

**PAPILLARY:** describing a tumour or growth exhibiting numerous surface projections

**VERRUCOUS:** Describing a tumour or growth exhibiting a rough warty surface

## Appendix C Oral Medicine Referral Letter - template

### LETTERHEAD

#### CONTACT INFORMATION OF REFERRING DENTIST/DOCTOR/STUDENT

Date .....

Oral Medicine Specialist's Name

Oral Medicine Clinic

School of Dentistry and Oral health, Centre for Medicine and Oral Health

GH1, 16-30 High Street, Southport, QLD 4215

Dear .....

Re. **Patient Name, DOB: 00-00-0000; Address**

#### **Chief complaint:**

*Thank you for seeing OR I/we had the pleasure of seeing Mr/Ms Abcd, a 00 year old ....., with .....  
(possibly in patients own language)*

#### **History of Presenting Illness (HPI):**

*Explain in professional language*

#### **Medical History/Drug-Medication Current and Past:**

*Brief the entire medical history including dental and drug history, if any.*

#### **Family/Social/Allergy History:**

*Brief everything under the above titles.*

#### **Extra-oral examination:**

*Full details (in words) on the extra-oral findings.*

#### **Intra-oral examination:**

*Full details (in words) on the intra-oral findings.*

#### **Investigations:**

*Already performed, if any or planned.*

#### **Differential/Provisional diagnosis:**

*Differential or provisional if you have*

#### **Treatment plan or the reason for referral:**

*Please describe in detail.*

Thanking you,  
Yours sincerely,

Your Name and Signature

## GUIDELINES FOR PAEDIATRIC DENTISTRY

### Introduction

These guidelines are written to provide information to clinicians, students and dental health care workers on the procedures to be followed in case of treating a child patient at the Griffith University Dental Clinic. Child patient in this context refers to a patient from birth until he or she has reached permanent dentition stage.

Students are expected to become familiar with these guidelines and to practice in accordance with the policies and procedures.

### Protocol

If a student and/or clinician encounter a child patient, he or she must follow the following steps.

#### **A. Take a comprehensive history as follows:**

- Chief complain
- History of presenting complain
- Medical and dental history
- Social and family history
- Dietary habits

#### **Medical history**

In addition to general medical history, some examples of medical history that should be recorded in child patient:

- Mother's pregnancy and child's birth
  - Maternal health
  - Details of birth
- Growth and development
  - Milestone, speech, motor skills, social
- Current and previous medication/illness

Medical histories should be updated every **six** months and a note made in the record that this has occurred.

#### **Dental history**

- Past dental experience
  - LA, extensive treatments
  - How the child coped with the treatment
- Dental development
- Preventive treatment received

Dental history will provide an operator the information of background of the child's dental experience. This is particularly important in terms of "child behaviour management" techniques to be used.



**Social and family history**

- Child's name/nickname
- Parents occupation
- Siblings
- Serious illness in the family
- Pets/hobbies/favourite activities
- Brushing habits
- Schooling

It is important to appreciate that detail of the social, dental and medical histories are accurate only the time they are recorded; they can change considerably within a short period of time. For example, the birth of another child or change of address can affect the parent's ability to take the child to the dental surgery. It is important to keep the history up to date by further questioning at the regular 4-6 month review visits.

**Dietary habits**

Student should give a "Diet Sheet" (Appendix I) to patient or parents/guardians to record their food intake for the next three days. Diet Sheet should be returned to the operator in the next appointment. Advice will be given to the patients/parents/guardians regarding a balanced diet and the restriction of sugar (sucrose) intake, after the diet sheet has been analysed and discussed with clinical supervisor.

**B. Examination of the patient****Extraoral examination**

Extraoral examination should begin when the child enters the clinic. Examination should include not only head and neck, but also the general appearance of the child, skin surfaces, hands, nails, and feet for example.

**Intraoral examination**

Intraoral examination should include both soft and hard tissue for example tongue, palates, tonsil, oral mucosal tissue, gingival and periodontal tissue. Saliva flow, oral hygiene, stage of dentition (deciduous or mixed dentition), occlusion (molar/canine relationship) should also be noted.

**Examination of the teeth**

The examination should follow a set of routine proceeding from quadrant to another, examining all surfaces of each tooth in turn. A logical sequence is to start the examination at tooth 18, proceeding around the maxillary arch until tooth 28 is reached. The examination of the mandibular teeth is then started at tooth 38 preceding the mandibular arch until tooth 48 is reached. This sequence ensures that no teeth are missed in the examination.

Sharp probe should be avoided during examination.

### **Special investigations**

Some special investigations:

- Radiography
- Other imaging
- Pulp sensitivities (vitality) test
- Blood investigation
- Microbiology
- Anatomical pathology
- Photography
- Study models
- Caries activities

If possible, OPG should be taken for every child patient and it should be available when treatment plan is being formed.

## **C. Oral diagnosis and treatment plan**

### **Oral diagnosis**

Some examples:

Five year old child patient with primary dentition  
Poor (fair/good) oral hygiene  
Early childhood caries (ECC)  
Supernumerary between #00 and #00

### **Treatment plan**

Treatment plan for child patients must be divided into separate phases as follows:

#### **1) Emergency phase**

Emergency treatment usually includes the management of chief complaint, relief of pain and/or removal of infection.

Some examples:

Extraction of tooth #00  
Relieve pain of tooth #00 by drainage

#### **2) Preventive phase**

Some examples:

Oral hygiene instruction (OHI)  
Dietary analysis and advice  
Prophylaxis  
Scale and clean  
Full mouth fluoride application  
Tooth mousse application of white spot lesions on #00  
Pit and fissure sealant of teeth #00, #00

**3) Restorative phase** (non-emergency extraction could be included at this phase)

Some examples:

- #00 Preventive Resin Restoration (PRR)
- #00, #00 Pulpotomy and stainless steel crown
- #00 DO composite resin
- #00, #00, #00, #00 Paedo Strip crown
- #00 Extraction

**4) Maintenance and review phase**

Some example:

- Review every 4 months
- Reinforce OHI
- Review dietary habits
- Review eruption of #00

**All treatment plans need to be signed off by a staff member, prior to beginning of treatment. And it is recommended that rubber dam is used during almost all restorative procedures.**

**Referral procedures****A. Referral to specialist in Paediatric Dentistry**

If a student or a clinician encounters a child patient that you would like to refer to a specialist in Paediatric Dentistry:

1. Consult and seek the approval from the tutor
2. Inform the patient about the need for referral
3. Inform the patient about the fees (Dental Clinic Reception staff will be able to provide more information)
4. Write a referral letter according to the template (Appendix II)
5. Complete the patient notes and attach the copy of the referral letter in EXACT

**B. Referral for treatments under General Anaesthesia (GA)**

If a student or a clinician encounters a child patient who requires treatments under general anaesthesia:

- 1: Consult and seek the approval from the tutor
2. Inform the patient about the need for referral
3. If the child has been referred to our clinic through Qld Health, you must provide the Child's name, the Parents name, Date of Birth, and parents contact details to the Dental Clinic Manager (Mary-Anne Clark), who will email them to Qld Health. Once Qld Health have been notified, they will contact the parent directly, to continue the treatment. Qld Health will then conduct their own assessment, and arrange for a general anaesthetic, if they feel appropriate.
4. If the child has come to the clinic as a Private patient, then we can recommend that the child be treated privately, at a practitioner, who has facilities for General Anaesthetic.

**Frequently performed treatments in Paediatric Dentistry**

There are several treatments that are frequently performed when treating child patients. Some of them are briefly described below:

- I. Pit and fissure sealant application**
- II. Invasive fissure sealant**
- III. Preventive resin restoration (PRR)**
- IV. Endodontic therapy for deciduous teeth**
- V. Stainless steel crown (SSC)**
- VI. Paedo composite strip crown**
- VII. Traumatic injuries to permanent incisor teeth**

**I. Pit and Fissure sealant application**

Two types of materials are used at present: resins and glass ionomer cements. Glass ionomer cement is seen more as a fluoride vehicle than a traditional sealant. It is a material of choice for interceptive caries treatment in newly erupted teeth with sign of initial caries, where the moisture control is difficult.

**Clinical procedures (resins)**

1. Assessment
2. Isolation
3. Prophylaxis with wet pumice
4. Rinse and dry
5. Acid etching
6. Rinse and dry. Tooth should have a dull white frosty appearance
7. Apply fissure sealant and cure with light (for light-cured type of material)
8. Check sealant retention with blunt probe
9. Adjust occlusion

**Clinical procedures (GIC)**

1. Assessment
2. Isolation
3. Prophylaxis with wet pumice
4. Rinse and dry but do not desiccate enamel surface
5. Apply fissure sealant and cure with light (for light-cured type of material)
6. Check sealant retention with blunt probe
7. Adjust occlusion

**II. Invasive fissure sealant**

This procedure investigates whether a suspicious pit or fissure is carious. Small round bur could be used to open the suspicious fissures. If the fissure is caries free and still in enamel, the tooth could be sealed with pit and fissure sealing materials as described above. However, if the caries extends into dentine, the “drilled” fissures should be filled with either composite resin or glass ionomer cement before the pit and fissure sealant is placed to cover the rest of the fissures. This procedure could be referred as preventive resin/glass ionomer restoration (PRR/PGIR).

### III. Preventive Resin Restoration (PRR)

This term refers to a procedure that includes the removal of soft carious tissue in parts of the fissure, with minimal loss of sound tissue. The cavity is then filled with composite resin and after having trimmed away the excess material, the whole fissure is acid etched and covered with resin sealant.

In case of newly erupted teeth, or other cases where the keeping of moisture control is difficult, glass ionomer is preferred. This technique refers as preventive GIC restoration (PGIR).

### IV. Endodontic therapy for deciduous teeth

Please note that direct pulp capping is not recommended for deciduous teeth. If the pulp is exposed in any deciduous teeth, pulpotomy/pulpectomy is recommended.

**Pulpotomy** refers to procedures in which removal of the coronal pulp is performed. Whilst **Pulpectomy** refers to the removal of the entire coronal and all or part of the radicular pulp tissues.

#### Pulpotomy

##### Indications

- Large, asymptomatic carious with substantial loss marginal ridge
- No irreversible pulpitis, chronic pain
- At least 2/3 of root still present
- Absence of abscess or fistula
- No inter-radicular, apical pathology
- No evidence of internal resorption
- When extraction is contra-indicated

##### Contra-indications

- Spontaneous pain
- Tenderness to percussion
- Swelling or fistula
- Pathological mobility
- Internal or external resorption
- Periapical and inter-radicular radiolucency
- Sign of acute dental infection
- Pulp calcification
- Uncontrollable haemorrhage from amputated pulp

##### Two widely used medicaments for pulpotomy

- Formocresol (Buckley's formulation, 1/5 diluted)
- Ferric sulphate

##### Clinical procedures for pulpotomy

1. Pre-operative radiograph
2. Local anaesthesia with use of topical anaesthesia
3. Rubber dam

4. Remove caries and determine site of pulp exposure
  - if there is no apparent exposure, cavity is made deeper until a 'dip' is felt
  - once the pulp chamber has been entered, move the bur 'sideway'
5. Remove roof of pulp chamber
6. Remove coronal pulp with a sterile large excavator or round bur
  - large excavator is preferred
  - when the round bur is used, only removed lightly along the floor of the pulp chamber
7. Control haemorrhage using dry sterile cotton pellets in the pulp chamber.
8. Place cotton pellet dampened with formocresol for 5 minutes. (3 minutes for ferric sulphate)
  - squeeze to remove excess of formocresol before placing cotton pellet into the pulp chamber
9. Clinically assess the condition of the pulpal tissues. Pulp stump should appear blackish brown. If bleeding occurs, check for residual pulp tissue and reapply formocresol for 2-4 minutes
10. Fill pulp chamber with thick mixture of ZOE and restore the tooth with temporary restorative materials before placing Stainless Steel Crown (SSC) in the next appointment.

## **Pulpectomy**

### **Indications**

- Irreversible inflammation extending to the radicular pulp
- Chronic pain
- Necrotic pulps
- Furcation / apical radiolucency
- Abnormal tooth mobility
- Swelling, abscess, fistula, sinus tract
- Cellulitis

### **Contraindications**

- Un-restorable crown
- Advanced pathological root resorption
- Less than 2/3 root length left

### **Clinical procedures for pulpectomy**

In general, it will take 2 appointments to complete pulpectomy

#### **Appointment 1**

1. Pre-operative radiograph. Periapical radiograph is preferred
2. Local anaesthesia with use of topical anaesthesia
3. Rubber dam
4. Remove caries and determine site of pulp exposure

5. Remove roof of pulp chamber
6. Remove coronal pulp to identify opening of the root canals
7. Estimate the working length from the radiograph, 1-2mm within the apex
8. Remove the radicular pulp tissue up to the working length
9. Gentle canal debridement with files, usually size 15 up to size 30
10. Irrigate root canals with NaOCl or saline solution in between the instrumentation and dry the canals with paper points
11. Place a pellet moistened with formocresol in the pulp chamber for 7-14 days
12. Temporary restoration with IRM, GIC or composite

## **Appointment 2**

1. Re-open the access. Remove the temporary restoration
2. Irrigate and dry the canals
3. Fill the canals with root canal filling material
  - Signs/symptoms should be resolved before root filling can be performed
4. Post-operative radiograph to check root fillings
5. Fill the pulp chamber with IRM, GIC or composite
6. Prepare and place a stainless steel crown (SSC)
  - SSC can be performed in the next appointment

## **Root canal filling materials for deciduous teeth**

- Zinc Oxide / Eugenol (ZOE)
- Kri Paste ( Iodoform paste)
- Vitapex, Metapex (Iodoform + Calcium hydroxide)

## **V. Stainless steel crown (SSC)**

### **Indications**

- Multisurface caries (3 or more), recurrent caries
- Rampant caries
- After pulp therapy
- Hypoplastic enamel
- Developmental enamel defects
- Tooth fractures
- Tooth wear
- Orthodontic or prosthetic appliance retention

### **Stainless Steel Crown preparation**

1. Check pre-treatment occlusion
2. Check the size/space to select a crown
3. LA, Rubber dam, wedge
4. Occlusal reduction
  - Reduction by 1-1.5mm is necessary to provide clearance for the crown
  - Must follow the occlusal contours to ensure maximum resistance to displacement

5. Proximal reduction, NO buccal/lingual reduction
  - Nearly vertical slices to clear the contact areas and to create space for the crown
  - Enough clearance is confirmed by passing an explorer through the space
  - Avoid excessively tapered preparation and cutting a shoulder/ledge at gingival margin
6. Round-off all sharp line angles and edges by creating a bevel all along the occlusal one third of the preparation
7. Adjust the crown (trimming, crimping, contouring, polishing)
  - Try in the crown, check occlusion and contacts with adjacent teeth
  - Mark the gingival margin with a scaler or explorer. Trim the crown 1 mm beneath the scratch using curve scissors.
  - Crimp the last 1-2 mm of the margins with crown-crimping pliers.
  - When placing crowns in areas of space loss, mesio-distal adjustment is done by adjusting proximal contact areas with Weingatr Utility plier or Howe pliers.
8. Crown finishing and Cementation
  - Smooth crown margins with heatless stone and rubber wheel.
  - Rinse and dry the crown and the tooth
  - Lute with glass ionomer cement.
  - Seat from lingual towards buccal.
  - Remove excess cement with wet gauze, and an explorer.
  - Floss proximal areas to remove excess cement
  - Recheck occlusion and gingivae.
9. Final evaluation
  - Correct occlusion
  - Correct occlusal contour
  - Sufficient cementation
  - Adaptation to natural bulge
  - Close cervical fit
  - Correct sulcus depth
  - Correct crown length
10. Review
  - Check occlusion in every review visit
  - Healthy gingival margin around the crown

### **Patient and Parent Instructions**

- Cautions to avoid heavy chewing for time period recommended by crown cement manufacturer
- Reminder to brush after every meal and snacks
- Good flossing



## **VI. Paedo Composite strip crown**

### **Indications**

- Multisurface caries, recurrent caries
- Rampant caries
- After pulp therapy
- Malformed primary incisors
- Developmental defects
- Discoloration
- Fractured

### **Clinical procedures**

- LA
- Shade selection
- Crown selection
- Isolation (RD, cotton roll)
- Remove caries, GIC lining
- Incisor edge reduction
  - -1-1.5mm
- Proximal reduction
  - 0.5-1 mm, parallel to proximal walls
- Facial/lingual reduction
  - knife edge at gingival margin
- Round-off all line angle
- Adjust the crown form
  - Trimming by curve scissors
- Trial and fitting the crown form
  - 0.5-1mm below the gingival margin
- Vent preparation on the palatal surface of the crown form
  - allow air and excess composite to escape
- Etching, bonding the tooth surfaces
- Fill up the crown form with composite
  - approximately 2/3 of the crown form
- Seat the crown form onto the tooth, remove excess material, cure the composite
- Remove the crown form
  - excavator or probe is inserted beneath the edge of crown form
- Final evaluation, polishing
- Review

## VII. Traumatic injuries to the permanent incisor teeth

Traumatic injuries to the permanent incisor can be classified according to the extend of injuries

- Fracture involving enamel only
- Fracture involving enamel and dentine
- Fracture involving enamel, dentine and pulp
- Fracture of the root
- Fracture of the crown and root
- Subluxation (loosening of the tooth)
- Avulsion (complete loss of tooth)

### Endodontic treatment of permanent incisor with crown fracture involving pulp

	<b>Tooth status</b>	<b>Treatment</b>
<b>Vital</b>	Open apex	Pulpotomy
	Closed apex	Pulp capping or root filling
<b>Non-vital</b>	Open apex	Apexification
	Closed apex	Root filling

## Diet Sheet

**Patient Name** : -----

Time	Name of food or drinks Or a description	Quantity
<b>Day 1</b> ----/----/-----		
<b>Day 2</b> ----/----/-----		
<b>Day 3</b> ----/----/-----		

## Oral Diagnosis and Treatment Plan in Paediatric Dentistry

Patient Name and Date of Birth \_\_\_\_\_

### Oral Diagnosis

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### Treatment Plan

#### Emergency

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#### Prevention

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#### Restoration / Extraction

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#### Review/ maintenance

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Tutor approved the treatment plan (signature/date) \_\_\_\_\_

## GUIDELINES FOR PERIODONTOLOGY

GradDipDent clinical activity in periodontology will adhere to the following principles:

1. All patients will be screened for presence of periodontitis using the Periodontal Screening and Recording (PSR) index. A PSR index must be recorded for EVERY patient. This is done by carrying out a full mouth probing (six points per tooth) and recording a PSR index as outlined below.
2. If a score of 3 or 4 is recorded in two or more sextants, the patient is designated a 'periodontitis' patient. A 'periodontitis' patient will require a full periodontal examination, including comprehensive risk assessment and a full charting. This is carried out on a designated session under the supervision of the discipline lead or a delegate of the discipline lead. Students will be advised of the 'periodontology' sessions and supervisors.
3. The treatment outlined in the treatment plan should be carried out under the supervision of a periodontology 'delegate' at the designated 'periodontology' sessions.
4. Following completion of the periodontal treatment, a review is carried out approximately 6-8 weeks later. This periodontal review must be carried out at a designated 'periodontology' session. Based on the findings at the review, and a reassessment of the risk profile, a supportive periodontal therapy plan is formulated. This supportive periodontal therapy may be carried out at any time, but it is strongly recommended that it is carried out at the designated 'periodontology' sessions.
5. Any patient who is not designated a 'periodontitis' patient, but is still deemed to require a periodontal consultation, e.g. Crown lengthening, mucogingival problems, recession, mobility, furcation involvement, should be booked into one of the 'periodontology' sessions.

### Periodontal Screening

All patients should be screened for the presence of periodontal disease using the Periodontal Screening and Recording Index. The Periodontal Screening and Recording Index (PSR) is based on the CPITN (Community Periodontal Index of Treatment Needs) proposed by the WHO in the 1980's. This index is used to ensure all patients have a periodontal record and if required, full periodontal examination. A simple grid is used to record the worst score per sextant, an asterisk (\*) providing a cue that a sextant contains signs of previous or existing periodontitis or requires more thorough investigation such as:

- Furcation involvement
- Recession > 3.5 mm
- Mobility
- Mucogingival problems

A code should be recorded for all sextants containing 2 or more teeth by:

- Probing circumferentially around all teeth
- Recording only the worst score for each sextant
- Sextants with single teeth, if not scheduled for extraction, should be included in the adjacent sextant

The following table indicates the appropriate score for varying degrees of periodontal disease:

Code	Periodontal Status
0	Healthy Periodontium (PD<3.5mm)
1	Bleeding / Plaque Present (PD<3.5mm)
2	Calculus Detected (PD<3.5mm)
3	Probing depths 4-5mm
4	Probing depths > 6mm

Following screening, if two or more sextants have a score of 3 or 4, the patient is identified as 'periodontitis' patient and a full periodontal charting is required. This is followed by a periodontal risk assessment and a periodontal treatment plan.

### Periodontal Treatment

Once a patient is identified as a 'periodontitis' patient and a full periodontal charting is carried out, a periodontal risk assessment and treatment plan is formulated in consultation with a designated periodontology tutor. The students will be advised of who these delegates are and when they will be available for consultation. Following completion of the periodontal treatment plan, a periodontal review visit is arranged for 6-8 weeks following the completion of the initial treatment. At this time, an appropriate periodontal maintenance regime is formulated.

### Referral to postgraduate specialist training program – DCLinDent (Perio)

Patient with advanced periodontal problems, that are beyond the scope of practice of general dentistry, can be referred from the GradDipDent to the DCLinDent program after a charting/risk assessment with the perio supervisor.

### Guidelines for referring to specialist training DCLinDent(Perio) program:

Patients with the following characteristics are suitable for the DCLinDent (Perio) specialist periodontics training program:

1. Moderate to advanced periodontitis - patients with generalized pocketing > 6mm. These patients should be advised that there will be a cost associated with this treatment. For example one visit of debridement is in the order of \$150 per debridement visit, i.e. \$600 for a full mouth debridement by quadrant over 4 visits. If the disease is more localized, fewer appointments will be needed and the cost is reduced. Detailed costs will be discussed at the time of consultation. These patients should be referred to the postgraduate clinic and should present there with an OPG.
2. Any other periodontal disease requiring specialist periodontics consultation (e.g. aggressive periodontitis, mucogingival defects, vertical periodontal defects, non-responsive/severe gingivitis)
3. Implant patients - any patients who are candidates for and interested in implant treatment should be booked in the postgraduate clinic on Thursdays. The cost of treatment starts from \$3200 for a restored implant fixture. More accurate costs will be given following consultation. The patient should present with an OPG. Any patient requiring specialist periodontics assessment, who is aware of the financial considerations, can be directly booked with the postgraduate students

## Periodontal Procedures and Assessment for GradDipDent students

### **Medical / Dental History and Periodontal charting**

*The student must be able to:*

- Conduct an accurate Clinical Examination
- Complete Dental & periodontal history
- Evaluate family history of the patient
- Investigate and discuss with the patient medical conditions that affect periodontal treatment
- Show understanding of drugs interacting with periodontal treatment.
- Evaluate and discuss with the patient behavioural factors affecting periodontal treatment (smoking, oral hygiene habits)
- Provide assistance for behavioural change (smoking cessation, consultation etc) if appropriate
- Decide if further tests and information gathering is required (eg. Glucose tolerance tests, consultation with GP, Vitality testing, dietary analysis etc)
- Register periodontal pockets accurately by 2mm or less
- Register gingival recession accurately by 2mm or less
- Register of indicators such as BOP, and other parameters as appropriate (furcation, suppuration, mobility, iatrogenic conditions such overhanging margins etc)

### **Diagnosis**

*The student must be able to:*

- Decide the appropriate radiographic examination (full mouth periapical radiographs, selected periapical radiographs, OPG, other).
- Correctly interpret the radiographic findings
- Correctly identify acute forms of periodontal disease
- 
- Correctly diagnose the type and severity of periodontal disease, as based on the AAP Classification

### **Oral Hygiene Instruction and maintenance**

*The student must be able to:*

- Register plaque present through the use of plaque disclosing agent and O' Leary plaque index
- Show to the patient and discuss the presence of plaque on tooth surfaces
- Select and demonstrate to the patient the appropriate Oral Hygiene technique
- Select and demonstrate to the patient the appropriate Oral Hygiene media and instruments, as based on the patient needs
- Decide if adjunct chemical plaque control is needed and recommend frequency and dosage
- Conduct professional plaque removal / polishing with rubber cup, paste and appropriate interdental cleaning aids
- Continuously control and support patient's compliance, oral hygiene motivation and technique

- Assess the outcome of the periodontal treatment and act accordingly if further treatment is required
- Correctly decide when a specialist referral is required.

**Supra and Sub Gingival debridement**

*The student must be able to:*

- Correct preoperative sharpening of the instruments
- Correct sharpening during the scaling procedure if needed (use of sharpening stone)
- Correct application of LA, as directed by the patient's condition and needs
- Correctly use the appropriate hand instruments for removal of supragingival and subgingival plaque and calculus
- Correctly use ultrasonic scalers for removal of supragingival and subgingival plaque and calculus
- Apply proper care of the adjacent soft tissues during instrumentation of periodontal pockets
- Adequately inform the patient on possible complications of scaling (hypersensitivity, pain, discomfort, gingival recession etc)
- Adequately treat complications of scaling if needed.



## Care after periodontal surgery

Generally Periodontal surgery has a very low incidence of post operative infection and complications. The Success of your surgery depends on you caring for your mouth after the surgery. The following few tips will make this easier for you.

### WHAT TO EXPECT

- Take it easy
- You can expect some post operative pain. You will be advised of an appropriate pain killer and dosage. Never take more than the recommended dose. You should maintain a normal diet when taking pain killers.
- Your teeth may initially feel slightly loose. This is normal and disappears quickly. There may also be sensitivity of the teeth to hot and cold foods, drinks and biting, but this is only a temporary condition.
- Some swelling and pain near the area of the surgery can be expected in the following 2 – 3 days and is normal. Ice packs applied to the face in the first 24 hours will help to reduce the amount of swelling. The swelling should improve day by day after the first 2 – 3 days.
- If you have a dressing, try and leave it alone. It will set in your mouth and can be removed at your next appointment. It may come loose, you will be told if and when you should have it replaced.

### DON'T

- Don't bite your lip or tongue when they are numb. Try not to play with the wound or stitches with your tongue etc.
- Don't suck and don't keep spitting out.
- Don't wash your mouth out forcibly with water or mouthwash.
- Don't **SMOKE**. The longer you go without smoking, the faster the healing.
- Don't brush the surgical area. Do brush the rest of your mouth.
- Don't drink alcohol.
- Don't have hot drinks.
- Don't use Aspirin or aspirin containing painkillers.

### DO

- Do use the prescribed Chlorhexidine (Savacol), Plaquacide, Difflam Dental mouthwash twice (2) a day. It is very important to keep your mouth clean. Always be gentle, always rinse before you go to sleep, try to rinse about 1 hour after you brush your other teeth.

### COMPLICATIONS

- **Bleeding**

Discoloured saliva is not true bleeding. It is normal to have a slight ooze after the local anaesthetic wears off. If you have true bleeding, wash with (ice) cold water. Place a wet pack (e.g. gauze over the wound and apply pressure for 15 -20 minutes. If bleeding persists please contact the clinic.

- **Persistent Swelling**

Swelling and pain usually decrease after the first 2 -3 days. If there is no sign of improvement, increasing pain and swelling or increased temperature or general tiredness after the first 2 -3days, please contact the clinic so that you can be reviewed, as soon as possible.

Your clinician is \_\_\_\_\_ Your surgery was performed on \_\_\_\_\_

Your next appointment is on \_\_\_\_\_ At \_\_\_\_\_

**If you have any problems, please contact the Dental Clinic, Griffith University, School of Dentistry and Oral Health, High Street, Southport.**

**PHONE: (07) 5678 0220**

## **GUIDELINES FOR PREVENTIVE DENTISTRY**

Supervisors are to ensure that students' main focus is on prevention for each patient. Marks should be deducted if oral hygiene and compliance is not evaluated and recorded each visit. The following is a guideline for students to refer to when considering oral hygiene and prevention for each patient.

Initiation of preventive measures precedes all clinical services except in the case of an emergency. The aim of prevention is to motivate the patient to learn and practice daily procedures of self-care and therefore patient compliance should be monitored each visit. Any advice given or products recommended must be clearly recorded in the patient records. Compliance with Oral Hygiene advice must be entered into the records for each visit.

When writing the prevention component of a treatment plan each patient must be considered as an individual. Health promotion and disease prevention are delivered following an assessment of the patient's needs.

### **Controlling Disease**

- Mechanical/chemical removal of plaque (oral hygiene)
- Chemical (antimicrobial) modification of plaque
- Use of fluorides
- Dietary composition
- Salivary composition and stimulation

### **Prevention Plan**

- Consider the medical, social, educational, occupational, socioeconomic and dental history of the patient
- Recognise the influence of age and physical or mental disabilities on oral health
- Assess attitude towards oral health and oral care
- Determine the current personal oral care procedures and frequency
- Determine goals with the patient and a timeline to reach these goals
- Provide motivating demonstration and supervision for daily self-care, biofilm removal, self-applied fluoride and other preventive measures.

## Oral Hygiene

### Mechanical Plaque Control in the Clinic

#### Tooth-Brushing

- Apply disclosing solution and using a mirror, highlight problem areas to patient. Ask the patient to demonstrate brushing as a baseline for what is to be advised for the brushing technique. Demonstrate brushing of the patient's teeth with a mirror and ask for this to be repeated by the patient. If manual dexterity affects brushing skills advise the use of an electric toothbrush or enhanced handles for manual brushes.
- Always advise the use of a soft brush. Ultrasoft brushes are available in pharmacies for inflamed tissues. Reassure patient that bleeding can be part of the healing process and to continue brushing the gums.
- Endtuft brushes are recommended for difficult to reach areas such as the proximal surfaces of teeth adjacent to an extraction site or the distal surface of the most posterior molar teeth.
- Review compliance each visit by evaluating plaque deposits and signs of gingival inflammation. Reassess patient motivation level.
- Small children can be taught circular brushing where they close their teeth together and brush in circles reaching the gums of top and bottom teeth. Teach them "outside, inside and on top" and demonstrate this on the teeth model. It is advisable to ask the parent to assist in their children's brushing until they are 8 years old. Demonstrate to the parent the most effective way of accessing child's teeth for brushing and flossing. One method is to have the child standing in front of the parent and facing the same direction. The head is tilted back and supported by the parent.
- "Lift the Lip" is advised for all patients to enable them to check their teeth in a mirror by asking them to pull the lips away from upper and lower teeth. This enables inspection for plaque around the gingival margins and for signs of gingivitis. Regular use of disclosing tablets should be advised.

## Interdental Cleaning

- The importance of daily interproximal plaque removal should be stressed to all patients. This can be achieved by the use of dental floss, floss holders, superfloss, interdental brushes or tooth-picks.
- If advising conventional flossing, demonstrate first and then ask the patient to repeat. If the use of standard waxed floss proves to be difficult for the patient, suggest and demonstrate the use of floss holders such as flossettes or floss holders.
- Children's teeth should be flossed daily by a parent until the age when they are capable of performing it independently. Show parents how to perform this.
- Superfloss is recommended for removing plaque under bridges, implants, large embrasures and around braces.
- Floss threaders are available from pharmacies and are particularly useful for patients with orthodontic braces
- The clinic offers a range of interdental brushes for sale. These may be recommended for patients who are unable to floss efficiently and for those with large embrasures. Choose the appropriate sized brushes and demonstrate these to the patient. Ensure that the patient is also able to repeat the correct use of these. Use the Pixter prescription pad to assist the patient in purchasing the correct brushes. There is a range of ultrasoft interdental brushes offered by TePe available in pharmacies.
- Monitor patient compliance each visit.

## Professional Mechanical Plaque Removal

Prophylaxis involving the use of abrasive prophylaxis paste and rubber cups or brushes is **not recommended** for routine treatment as it is an ineffective prevention measure and can cause adverse affects on teeth. 30 seconds of use of pumice and a rubber cup can remove 4 microns of fluoride rich enamel. Even though this is expected by most patients it is an unnecessary procedure in most cases.

Tooth-brushing instruction is far more effective in encouraging patient compliance for plaque control.

Abrasive polishing should never be used on a patient where there are signs of tooth-wear or compromised saliva, around crowns, implants or restorations. Demineralised tooth structure loses 4 times more tooth structure during a prophylaxis than intact enamel. If a prophylaxis is necessary, nonabrasive tooth-paste should be used with a rubber cup instead of the abrasive paste.

Heat generated by high speed rotation of the prophylaxis cup or brush can compromise the pulp status of the tooth.

Trauma to the gingival tissue may occur from the rotating cup or brush especially where inflammation is present.

**Selective** use of prophylaxis paste and a rubber cup or brush is only recommended if there is extrinsic staining on the teeth, or after the teeth are scaled to remove fine calculus deposits. The slow speed hand-piece must be reduced to 400rpm and the rubber cup must remain lubricated at all times with paste. Do not spend more than a few seconds on each tooth. The prophylaxis cup's flange should be flared around or just under the gingival margins

### **Chemical Plaque Control**

Chemical plaque control can be considered as an adjunct to mechanical plaque control. However there are few chemical anti-plaque agents with documented cariostatic effect. The limitation is due to the fact that plaque microorganisms are organised in a biofilm. Therefore the micro-organisms in plaque are less susceptible to microbial agents. Substantivity is relevant in antimicrobial agents as it refers to their ability to bind to oral surfaces including mucosal surfaces, tooth surfaces, pellicle and supragingival plaque, and the rate of release from the binding surfaces

Antimicrobial agents include:

**Chlorhexidine:** Mouth-rinse e.g. Savacol which contains .12% or .2% Chlorhexidine Gluconate and 11 – 14 % alcohol. It has a pH of 5.5. It remains in an active state for up to 12 hours in the mouth (high substantivity).

Side effects: staining after 2 weeks, a bitter taste and transient loss of taste.

Advised for: patients with plaque control problems (e.g. mentally or physical disabled), plaque induced gingivitis, patients undergoing non-surgical periodontal therapy, immediate post-periodontal surgery period during the healing phase, and patients with limited manual dexterity.

A non-staining chlorhexidine mouth-wash which is available in .2% or .12% concentration is Curasept. This can be ordered on line [curaden@bigpond.net.au](mailto:curaden@bigpond.net.au) or by phoning 0882726196. It is also available as a gel or mouthspray and an SLS tooth-paste.

Administration: Patient to rinse for 60 seconds with 10 mls. after brushing and flossing twice per day. Patients need to be advised not to brush with tooth-paste up to half an hour following use because of the interaction and possible inactivation between Chlorhexidine and Sodium Laurel Sulphate. Rinse with mouthwash after meals and do not rinse with water immediately after use.

### **Phenolic Compounds (Essential Oils)**

Triclosan and a combination of 3 essential oils are 2 distinct types of phenolic compounds with antimicrobial properties. Triclosan has a dual mechanism of bactericidal activity and bacterial enzyme inhibition.

Triclosan is delivered in Colgate Total Toothpaste via a copolymer, the combination of which increases substantivity.

Essential oil mouth-washes (Listerine) are a mixture of 3 phenolic-derived essential oils – thymol, menthol and eucalyptol, and contain 26.9% alcohol (ethanol). Mechanism of action is related to the alteration of the bacteria cell walls and it is an effective agent for reduction of bacterial plaque and gingivitis. It has a low substantivity.

Adverse affects reported: bitter taste, burning sensation and possible staining.

Considering the high alcohol content of this product, it should not be recommended to patients with xerostomia, worn dentition, or to alcoholics or children.

Administration: Recommended for patients who have problems with plaque control, or impaired manual dexterity. Patient advised to rinse for 30 seconds with 10 mls after brushing and flossing twice per day and should be warned about the drying affect on the oral mucosa.

### **Fluoride Therapies**

Fluoride limits demineralisation of teeth enamel when present in solution. Fluoride present on the tooth surface and in plaque fluid inhibits acid demineralisation by reducing the solubility of the tooth's enamel. It enhances remineralisation by adsorbing to the tooth surface and attracting calcium ions. Fluoride ions incorporate into the remineralising tooth structure resulting in the development of fluorapatite crystals. These are less susceptible to future demineralisation.

Fluoride inhibits plaque bacteria by interfering with the acid production of acidogenic bacteria.

**Fluoride supplements** are no longer recommended except for high risk individuals because of the risk of fluorosis. Direct exposure to the oral cavity has proven to be far more an effective vehicle for fluoride.

Topical Fluoride products include:

**Tooth-pastes** with fluoride concentration ranging from 500 ppm (children) to 5000ppm (high risk caries). Special consideration must be given when recommending fluoridated tooth-pastes to young children because of the inability of children under 4 to expectorate. Supervision is recommended until the child is 8 years old. Only a very small amount of paste should be placed on the brush (the bristles at the end of the brush dipped into the tooth-paste tube is sufficient). Encourage the child to swish and spit out, not swallow. Most tooth-pastes contain sodium fluoride (Na F) or sodium monofluorophosphate (NaMFP). NaF indicates superior caries reduction attributed to the rapid disassociation of sodium fluoride.

Stannous fluoride tooth-paste (Colgate Gel-Kam) is advocated to patients over 12 years old for the management of dentinal hypersensitivity and the antibacterial effects of the stannous ion. Long term use is contraindicated because of staining.

#### **Fluoride Mouth-Rinses:**

May be used as well as tooth-paste for patients >12 years old to manage dental caries.

Daily: Sodium fluoride 0.12% is an over the counter product with low fluoride concentration of 220ppm (e.g. Colgate Neutrafluor 220). It is used as an adjunct to brushing with a fluoride tooth-paste.

Administration: Vigorously rinse and swish 10 mls, then expectorate. Do not rinse with water for half an hour. Not recommended for children <6.

Weekly: Sodium Fluoride 0.2% or 990ppm fluoride (e.g. Neutrafluor 990). Used in school-based programs. Can be used daily for patients at high risk of caries.

Neutrafluor 5000 Na F toothpaste is recommended to high risk caries patients over 12 years old for daily brushing.

Neutrafluor 5000 Na F gel contains no SLS and is used for patients with a compromised salivary flow and high caries risk, particularly for post administration of radiation therapy for patients with head and neck cancer. It is used after brushing and smeared on the teeth or placed in custom trays for one minute then expectorated.

**Professionally Applied Fluorides (In-Office Technique)**

High potency Na F gels such as Neutrafluor 9000. Professional application of high concentration topical fluoride. It is no longer considered necessary for all patients. Client Selection Criteria:

- Demonstrated risk for caries development
- Presence of newly erupted teeth
- Client's ability to expectorate and not swallow fluoride
- Age of client. Administration of high dose fluorides to a child under 12 could result in fluoride toxicity. Older adults present the same risks as the child patient
- Physical or mental disability inhibiting of the necessity of expectorating
- Overall exposure to fluoride

Administration: Typically delivered in the tray technique after teeth are air dried then isolated with cotton rolls. High speed suction is used. It is not necessary to prophylax teeth first with fluoride prophylax paste, but debris can be removed with a tooth-brush. Leave 4 minutes and ask patient not to rinse out or eat for half an hour.

**Acidulate Phosphate Fluoride Products (Colgate Fluoro Care 200)** has a pH of 4 and enhances fluoride up-take in enamel. Limited use as restorations may be damaged by its use.

**Fluoride Varnishes (e.g. Duraphat)**

22,600ppm NaF varnish painted on teeth to prolong fluoride exposure. Rapid drying prevents ingestion thus minimising risk of toxicity

Recommended for:

- Children and adults at risk for dental caries
- When longer fluoride contact is needed
- When the client cannot tolerate a professional fluoride treatment

Administration:

Clean teeth with brush. Wipe area with gauze and insert saliva ejector. Using a cotton bud or microbrush apply varnish to area affected. Dental floss may be used to apply Duraphat interproximally. Ask client not to eat or drink for half an hour. Document tooth surfaces where placed.



### **Tooth Mousse Plus**

Tooth Mousse Plus is a water based cream containing Recaldent with incorporated fluoride (CPP-ACPF:casein phosphopeptide – amorphous calcium phosphate fluoride). The level of fluoride is 0.2%, (900ppm), which approximates that in adult strength toothpastes. When CPP-ACPF is applied in the oral environment, it will bind to biofilms, plaque, bacteria, hydroxyapatite and soft tissue localising calcium, phosphate and fluoride. It is not recommended for children under 6 because of the fluoride concentration or for those with lactose intolerance. Tooth Mousse (no fluoride) can be used for children under 6.

Recommended for:

- Active decay
- Sensitive teeth
- Erosion of tooth wear
- Dry mouth
- Acidic mouth
- Morning sickness during pregnancy
- Patients with orthodontic braces
- White spot lesions
- At increased risk because of medications or medical conditions
- Following teeth whitening

Administration:

A general recommendation is to apply every evening after cleaning your teeth because saliva flow is reduced at night and this is the ideal time to offer increased protection.

Place a pea sized amount on the teeth with a finger then spread around the mouth with the tongue. Expectorate but do not rinse off. Can be placed in custom made trays.

Tooth Mousse Plus and Tooth Mousse can be ordered by ringing 1300854529 or online at [www.dentalexpress.com.au](http://www.dentalexpress.com.au).

## Saliva Testing

Salivary testing kits and instructions are readily available in the clinic. Saliva tests are to be conducted on patients when the following signs and symptoms are indicated:

- Patient reporting symptoms of a dry mouth
- Frothy saliva
- Signs of tooth erosion
- Diet including high intake of acidic drinks
- High caffeine intake
- Low water intake
- Swollen salivary glands
- Medical history indicating an intake of drugs which affect salivary flow rate.

Administration:

Explain clearly to the patient what you are about to do. Using the traffic light method, test and record the following:

- pH of resting saliva and record results according to the pH indicator.
- Minor salivary glands by asking the patient to hold out lower lip for 1 minute. Place one sheet of a tissue on the lip to blot the secretions so that they are visible on the tissue.
- Salivary flow rate by asking patient to chew wax for 5 minutes and to spit into the cup provided and not to swallow.
- Buffering capacity by drawing up saliva with a pipette and dispensing one drop onto each of the 3 test pads. After 5 minutes compare the colour with the provided table.

## Sugar – Free Chewing Gum

Sugar free gums are recommended to stimulate salivary flow from the parotid and sub-mandibular salivary glands for patients with xerostomia, a caries risk or signs of erosion. Sugar-free gums contain the antimicrobial ingredient Xylitol. Recaldent chewing gum also contains ACP CCP which enhances the supersaturation of salivary calcium and phosphate ions and neutralises the saliva. Recaldent can be ordered by ringing 1300854529 or online at [www.dentalexpress.com.au](http://www.dentalexpress.com.au).

Sugar-free chewing gums containing citric acid are not recommended as they produce insoluble calcium citrate. This is useless for remineralisation as the calcium ion cannot be separated.

Biotene non-stick sugar-free gum is available for patients with dentures.

Too much of these products can cause diarrhoea because of the polyol used as a sugar substitute.

### **Saliva Replacement Products**

Factors contributing to dry mouth include: aging, Sjogren's Syndrome, stress, radiation therapy and over 200 drugs. Biotene products are designed to provide prevention, therapeutic relief and treatment for dry mouth sufferers. Each product functions to mimic the immune boosting capabilities of saliva as they contain salivary enzymes found naturally in human saliva.

Biotene mouth-wash is alcohol free, stain free, detergent free, and contains 3 anti-bacterial enzymes.

Biotene Dry Mouth Tooth-Paste is low-foaming and is recommended for bed-ridden patients or the handicapped.

Biotene Oral Balance is a long-lasting moisturising gel provides up to 8 hours comfort. It is non-drying so helps mouth breathers and improves retention under dentures.

GC have produced a similar product (Dry Mouth Gel) as Biotene mouth gel but it has a neutral pH, as compared to Biotene's pH of 5.

## SOME GUIDELINES FOR PROSTHODONTICS

(CURRENTLY BEING UPDATED – PLEASE CONSULT WITH PROF FLORIAN MACK)

### *Clinics*

- Only sign electronically when all items (medical history, charts, perio status, intra / extra oral status, TMJ, occlusion, logbook, lab-prescription etc) are completed AND SIGN ONLY ON THE SAME DAY THE TREATMENT WAS PERFORMED!!
- **Treatment Plans**  
Any treatment plan involving the restoration of four or more teeth or any prosthodontic treatment must be approved and signed off by Prof Florian Mack. Consultation hours for presenting treatment plans to Prof Florian Mack will be Tuesdays 15:00 - 16:00, and Thursdays 11:00 – 12:00 and 15:00 – 16:00 both in the extended semester and standard university semester.
- ALWAYS discuss fees with patients and make note (e.g. “discussed fees”) in Titanium Patients management system.
- Tutor has to sign off the assessment sheet.
- **Prosthodontic Work**  
Any completed prosthodontic work must be approved and signed off by Prof. Florian Mack before permanent insertion into and prior to completion of the appointment (please make appointments with patients within Prosthodontics consultation hours).  
*Note:* Model must be approved by tutor prior to commencing any technical work (see Dental Lab)
- Deadlines for any prosthodontic work will be announced 8 weeks before the end of the clinical semester. After a deadline specific work (see announcement) should not started to get all patients finished / treated before holidays.

### Study models

- When taking an alginate impression or Impregum impression **on prefabricated impression trays** on any dental patient a dorsal dam should always be used (“individualised impression trays”). In this clinic we use heavy body silicon (e.g. Optosil) as dam material.



- Take 2 scoops of Optosil and in total 3cm of activator, mix it manually and quick and place Optosil at the back and on the palate of the prefabricated tray.
- Place the tray into the mouth and take “impression”. Remove tray before it has set and trim off dam material that had contact with any teeth using a scalpel.
- After Optosil is hardened continue with alginate impression.



- After 5.30pm in late sessions please use ALGINOT (silicone based impression material) instead of Alginate. Alginot can be stored over night since the pros lab closes at 6pm to pour out impressions. (Alginot is used in the same mixing gun as Impregum).



### ***Other Impression materials***

- For any FPD's (crown or bridge) please use Impregum or the 2phase impression material AFFINIS (heavy and light body material). The tutor will make the decision about which is the best method at that time





- Retraction cords: Students have to place a pilot retraction cord (size 00 or 0) and on top a bigger sized retraction cord. During the impression the pilot cord remains in the sulcus and will be removed after the (successful) impression, whereas the 2<sup>nd</sup> retraction cord will be removed directly before the impression. We recommend an Infiltration prior any placements of retraction cords.
- After using Impregum students have to clean syringe immediately. Please keep all parts (e.g. tip). They will be reused after sterilisation.
- Impression material and other dental consumables are expensive! Please help students after 3<sup>rd</sup> failure when taking impressions. You might write a comment in the logbook whether the needed help was because of a difficult oral situation or because of lack of knowledge/skills of the student.

**Two step two phase impressions (we do not use single step two phase impressions!)**



- Prefabricated steel impression tray
- Kneadable/heavy body silicon as primary impression
- Light body as secondary impression
- Adhesive for impression tray



- Put retraction cords in sulcus and take primary impression using heavy body impression material.
- It is important to ease the heavy body impression to allow room for the light body material.
- 1. cut margin to a distance of 5mm to sulcus.





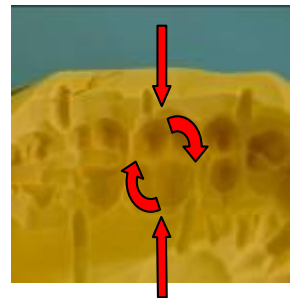
- 2. Cut off palate and smooth edges



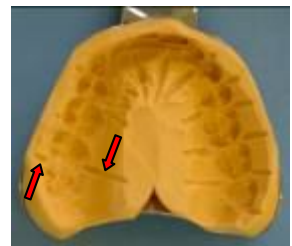
- 3. Cut off all undercuts and interdental septi



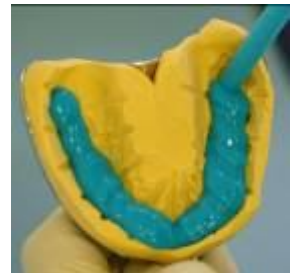
- For the prepared teeth, cut out Fissures and prep margins.
- For each prep, create two reciprocating outflow channels. This dictates the direction of flow of the light bodied impression material during the impression process.



- Cut outflow canals
- For each reciprocal interdental area, both palatal and buccal



- Light body material will be filled into primary impression by DA while dentist applies light body material to tooth and fissures (see impregum).

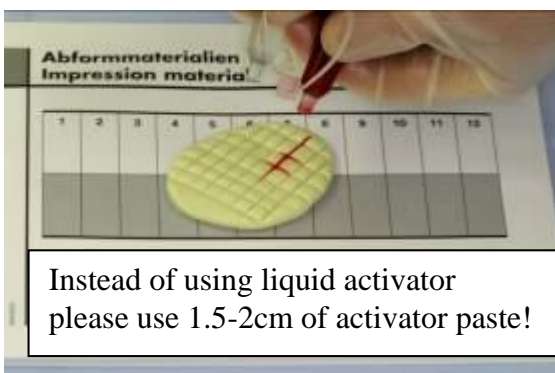


- Impression tray is placed into mouth and is firmly pressed into position for a few seconds only. After that hold impression tray in place, light body material will be extrude and a thin layer only should be visible.





- **Secondary impressions for any RPD and CD** in secondary tray's: use Impregum or XANTOPREN BLUE (c-silicone). Recommended amount of Xantopren blue:  
upper jaw: 20cm Xantopren blue and 15cm Activator  
lower jaw: 12cm Xantopren blue and 8cm Activator  
**(Please note: We are not using any ZnO Eugenol paste for impressions)**
- Muscle trimming in complete dentures or for the saddle area for any RPD or CD we use XANTOPREN FUNCTION (special silicone impression material for muscle trimming, replaces green stick; 1 scope with 1.5-2cm Activator) that – after knitting manually – will be put in a plastic syringe and pressed on the margin of the secondary impression tray. Don't forget to put adhesive on the margin!



## Face bow

- Any work that goes into the dental lab has to be mounted into articulator using facebow and centric or habitual occlusal record
- For treatment planning all study models of patients with more than 3 remaining teeth in each jaw have to be mounted into the articulator.
- For centric occlusal records use **beauty pink** wax. Students were told to take two centric records if centric records were needed.



- To determine the condyle track a protrusive record has to be taken!
- For habitual occlusion try to position models manually. If this is impossible use **REGESIL** occlusal registrations paste.



Some advice how to use the facebow:



Fig. 4.3-19: Placement of the earpiece opposite the dentist in the external auditory canal – with the jaws opened slightly

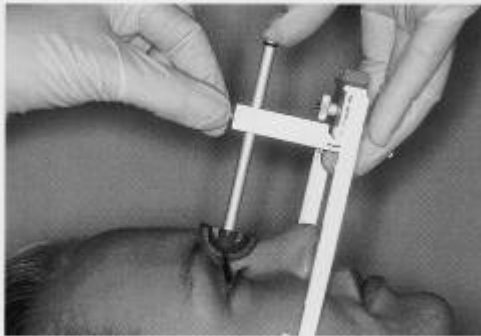


Fig. 4.3-24: Fixation of nasal locator in this position by tightening down the locator rod screw

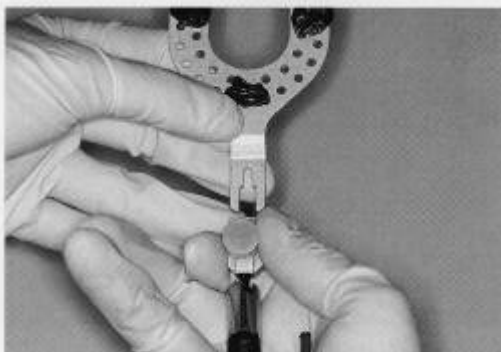


Fig. 4.3-26: Fastening the prepared bitefork to the 3D support prior to patient application



Fig. 4.3-28: Patient supporting the bitefork with both thumbs, the hands forming fists, lower arms held towards center of chest

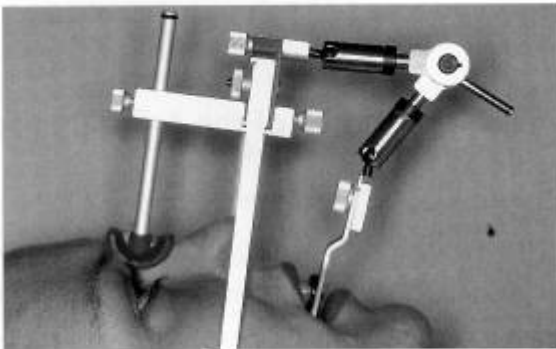


Fig. 4.3-31: Artex Rotofix facebow, application completed; the facebow maintains its position unsupported on the supine patient

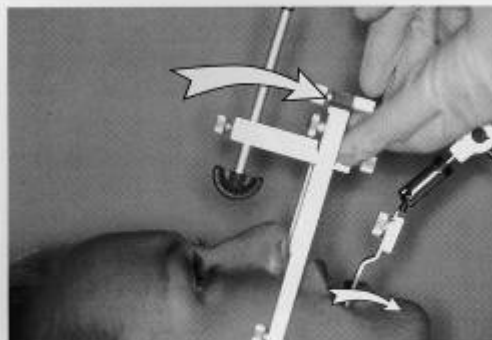


Fig. 4.3-33: Caudal rotation of the facebow round the earpieces pulls the bitefork off the teeth. The longitudinal supports can be pulled to posterior and apart.

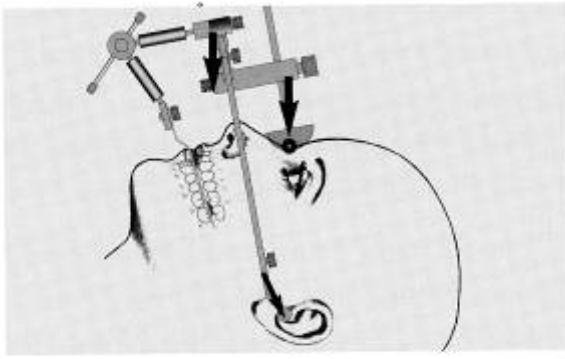


Fig. 4.3-37: Forces on a supine patient: The weight of the 3D-support mainly rests upon the root of the nose; a residual force is carried by the stable posterior wall of the entrance to the external auditory canal

(Source: Ahlers MO: Simulation of Occlusion in Restorative Dentistry)

### More Clinics

- After any RCT the tooth **must** be covered with an onlay or a crown and stabilized by a post. If the patient can't afford a crown the patient has to be informed about the risk of possible fracture of the clinical crown. As temporary (in this case to replace a permanent) filling only core paste will be used.
- Clinical photos should be taken for every treatment that was signed by me (comprehensive restorative or prosthodontic treatment). A digital SLR camera is stored at the front desk and will be signed out and must be returned after the photos have been taken. Students need clinical photos for their case presentation, which is part of the assessment. For details ask Prof. Florian Mack.



- Posts-System
  - We use the **Para Post XP System** from Whaledent.

○ **Dental Lab**

- Pros lab time Mon 12:00 – 15:00 and Fri 8:00 – 11:00
- All models for prosthodontic work must be approved by either Mr John Mackay or Mr Byron Bindley during Monday's 12:00–15:30 or Friday's 8:00–11:00 in the pros laboratory.
- For a successful course assessment a student has to perform during the year the following laboratory work in the prosthetics laboratory:
  - 1 full upper and 1 full lower complete denture including all finishing work on resin. Each complete denture after that should be done from the beginning up to mounting the teeth in wax. The rest will be done by Dental Technology (DT) students.
  - 3 waxed up crowns. The rest (casting, polishing) will be done by DT students.
  - All resin work e.g. splints, mouth guards, bleaching trays, temporary dentures will be done completely by Dental Science students (NOT DT student!).
  - Any inlay (gold / ceramic) will be done by DT-students
  - Any CrCo denture will be done by DT-students
- Where students require DT-student to assist with their cases, students should contact John Mackay or Jane Evans. It is preferable that this is done at the impression appointment or before.
- Please remember that a lab prescription must always be filled out if any work goes into the dental lab and signed off by tutors.

**Miscellaneous**

- The assessment sheet reports on treatment that is done or in process. A breach of any School clinic and laboratory policy (infection control, behaviour, dress code, record entry, etc) leads to a “formal warning notice” in writing to the Clinical Director.
- Any second additional breach of any school policy / roles leads automatically to the students' removal from the course and will result in a failing grade for the course if removal occurs after the HECS census date or in semester 2.
- Tutors may refer to School policies at:  
<http://www.griffith.edu.au/school/doh/policiesandprocedures.html>
- and the clinical manual.

- Missing more than 7% of any classes throughout the year will result in automatic failure of the course, independent of any excuses.
- All items recorded in the assessment sheet must also be electronically signed off with record completed correctly in the Patients Management System (PMS) if they are to be counted towards final marks.
- Before signing off records and assessment sheets, please always check if charts are completed, notes have been completed, fees have been charged through and treatment plan is recorded (see above).
- Tutors should supervise the same students all time.
- All mobile phones (staff, students and patients) should be switched off.
- Students bring patient to front desk after appointment and after electronically signature by tutor.

If there are any questions, please contact me:

Prof. Florian Mack

Phone: 07-567 80723

e-mail: f.mack@griffith.edu.au



## Care after implant surgery

Generally Implant surgery has a very low incidence of post operative infection and complications. The Success of your surgery depends on you caring for your mouth after the surgery. The following few tips will make this easier for you.

### WHAT TO EXPECT

- Take it easy
- You can expect some post operative pain. You will be advised of an appropriate pain killer and dosage. Never take more than the recommended dose. You should maintain a normal diet when taking pain killers.
- Teeth neighbouring the site of implant installation might feel slightly loose or might be sensitive to cold and hot foods. This is only a temporary condition and will improve soon.
- Some swelling and pain near the area of the surgery can be expected in the following 2 – 3 days and is normal. Ice packs applied to the face in the first 24 hours will help to reduce the amount of swelling. The swelling should improve day by day after the first 2 – 3 days.

### DON'T

- Don't bite your lip or tongue when they are numb. Try not to play with the wound or stitches with your tongue etc.
- Don't suck and don't keep spitting out.
- Don't wash your mouth out forcibly with water or mouthwash.
- Don't **SMOKE. Smoking during the healing period can jeopardise the integration of the titanium screw to the bone and increases the risk of losing the implant.**
- Don't brush the surgical area. Do brush the rest of your mouth.
- Don't drink alcohol.
- Don't have hot drinks.
- Don't use Aspirin or aspirin containing painkillers.

### DO

- Do use the prescribed Chlorhexidine (Savacol), Plaquacide, Difflam Dental mouthwash twice (2) a day. It is very important to keep your mouth clean. Always be gentle, always rinse before you go to sleep, try to rinse about 1 hour after you brush your other teeth.

### COMPLICATIONS

- **Bleeding**

Discoloured saliva is not true bleeding. It is normal to have a slight ooze after the local anaesthetic wears off. If you have true bleeding, wash with (ice) cold water. Place a wet pack (e.g. gauze over the wound and apply pressure for 15 -20 minutes. If bleeding persists please contact the clinic.

- **Persistent Swelling**

Swelling and pain usually decrease after the first 2 -3 days. If there is no sign of improvement, increasing pain and swelling or increased temperature or general tiredness after the first 2 -3days, please contact the clinic so that you can be reviewed, as soon as possible.

Your clinician is \_\_\_\_\_ Your surgery was performed on \_\_\_\_\_

Your next appointment is on \_\_\_\_\_ At \_\_\_\_\_

**If you have any problems, please contact the Dental Clinic, Griffith University, School of Dentistry and Oral Health, High Street, Southport.**

**PHONE: (07) 5678 0220**

## INFECTION CONTROL PROCEDURES

The basic principle of infection control is that proper technique can minimize the spread of infection to both the patient and the practitioner. Infection control is an important aspect of dental education and it is essential that students develop best practice early in their training. It is not sufficient to have infection control policies in place, it is also necessary to ensure programs are implemented and that all clinical staff and Student Dental Practitioners comply. To this regard, regular clinical infection control audits will be conducted

One of the risks of the delivery of health care is the possibility of cross infection. The School of Dentistry and Oral Health has a responsibility to minimize this risk and, therefore has adopted an Infection Control Policy that requires the wearing of a clinical over garment, disposable gloves, mask, and protective eye covering when oral examinations and dental procedures are being performed. School policy plus GU Health Policy is that each student/staff is to be vaccinated against Hepatitis B infection prior to commencement of clinical practice.

To implement this policy and coordinate a positive approach to infection control Griffith School of Dentistry and Oral Health has in place an infection control program that includes:

- Compliance with Commonwealth and State legislation and regulations including anti-discrimination and with Griffith University's policies and procedures;
- Ensuring that the School of DOH recognises its duty of care to minimise the risk of patients and providers acquiring a health care associated or occupational infection;
- Coordination by a suitably experienced and qualified healthcare worker;
- Development of an annual strategic plan for infection control that includes surveillance, education, staff health strategies and updating policy;
- Strategies to modify procedures and assess equipment associated with increased risk when appropriate and;
- Strategies to monitor the effectiveness of the infection control program and ongoing compliance with regulatory and licensing requirements

The following 4 paragraphs from the Dental Board of Queensland document should also be noted: <<http://www.dentalboard.qld.gov.au/documentlibraries/policy9.pdf>>:

3.1 The Dental Board insists that all patients are entitled to good standards of practice and care from their Dental Practitioners and other health care workers (including Student Dental Practitioners) regardless of the nature of their disease or conditions.

3.2 Health care workers owe a duty of care to patients and are therefore responsible the protection of patients against infection.

3.3 Under the general law and the Workplace Health and Safety Act 1995:

- a) An employer has a legal obligation to ensure workplace health and safety employees, patients and others at the workplace; and
- b) Dental Practitioners as employees, have a legal obligation to comply with employer's reasonable instructions, including instructions for workplace health safety,



and not to wilfully place at risk the workplace health and safety of any person in the workplace.

3.4 The Queensland Anti-Discrimination Act 1991 prohibits discrimination grounds of impairment (which includes the presence of a blood borne virus).

The high standards of infection control which we insist upon exist because it is never known for certain whether or not any given patient is carrying a BBV or other potential pathogen. All patients are assumed to be potentially infectious.

If a patient informs us in their medical history that they are, for example, HIV, Hepatitis B or C positive, then that is privileged and confidential information. This remains recorded as part of their confidential medical history, and can only be disclosed to another party with the patient's explicit permission. No extra precautions will be necessary for these patients as the same level of infection control will be undertaken for all patients.

Graduates of our clinical programmes who are registered professionals will be required to treat such patients in their practices: to refuse to do so is discriminatory and could result in action from the Dental Board.

At Griffith School of DOH, the Clinical Reference Group lead by the Clinical Director has agreed that, provided a BBV positive patient is not cognitively impaired or carrying a potentially dangerous opportunistic pathogen (such as open tuberculosis, for example), they should be treated in the general clinic. Please refer to the Blood Borne Virus policy in this manual

The School's procedures for Skin Breach Accidents are clear and every student and member of staff should be carrying a card attached to their ID and security swipe card.

It is expected of all clinical staff and Student Dental Practitioners to be fully aware of the content of the School of Dentistry and Oral Health INFECTION CONTROL PROCEDURE Manual

<http://www.griffith.edu.au/health/school-dentistry-oral-health/resources>

The Clinical Director, Clinical Manager and Course Convenors, are happy to counsel any students with concerns.

# PROTOCOL FOR MEDICAL EMERGENCIES WITHIN THE DENTAL OFFICE

## ***Description***

These guidelines are written to provide information to clinicians, students and dental health care workers on the procedures to be followed in case of a patient presenting with an orofacial disease (Appendix 00) at the Griffith University Dental Clinic. One must refer to this document and adhere to the procedures, depending on the individual case which will ensure the highest quality of patient care and meet with Griffith University Dental Clinic Patient Records legal requirements. Students are expected to become familiar with these guidelines and to practice in accordance with the policies and procedures.

## **Introduction**

Prevention is perhaps the best management of medical emergencies in a dental clinic but one cannot be certain that these emergencies will not occur in a dental clinic, so be prepared. The following is written only as an initial guideline in such an emergency. One must have basic knowledge of the signs and symptoms of these emergency situations to act quickly, efficiently and effectively. If you are uncertain, please call (yell if required to) for help from a senior clinician or the floor first aid officer. Most of the emergencies can be dealt with precision if more than one person could attend to the situation.

## **Protocol**

If a student and/or clinician encounter or suspect a patient with medical emergency, he or she must follow the respective algorithm. The FIVE steps in preparation for facing a medical emergency are:

1. medical history including history of allergy and drug history
2. assessment of patient
3. resuscitation knowledge, training and practice
4. knowledge of emergency medications and devices
5. calling for medical assistance

# Anaphylactic Reaction

History of any allergy should be noted from the medical history form and if not mentioned a student/clinician must ask about the details before you commence any dental procedure.

If you suspect an anaphylaxis in an adult with the following

Angioedema
Urticaria
Hypotension
Abdominal pain
Conjunctivitis
Erythema
Pruritus
Vomiting
Rhinitis

**Step 1.** CALL THE NUMBER **000** and ask for Ambulance service and brief them with the situation.

Try to answer all their questions

**Step 2.** Administer oxygen by mask (10L/min)

**Step 3.** Give IM Adrenaline on the lateral aspect of thigh (0.5ml of 1 in 1000 (1mg/ml)  
*Refer Box 30 pp184-5 of Therapeutic Guidelines, Oral and Dental version 1)*

**Step 4.** If NO response AFTER 5 minutes

**Step 5.** Repeat Step 3

**Step 6.** If patient loss consciousness, give basic life support (CPR)  
Maintain treatment until Ambulance or other medical assistance

# Cardiac Arrest

If you suspect cardiac arrest in an adult with the following

Loss of consciousness
No breathing
No pulse

**REMEMBER:** there will no be recovery if you do not call for help (000) and  
ambulance > basic life support (CPR) > cardio-respiratory resuscitation > advanced  
life support > oxygen delivery system > defibrillation

**Step 1.** CALL THE NUMBER **000** and ask for Ambulance service and brief them with the situation.

Try to answer all their questions

**Step 2.** Institute basic life support (CPR)

**Step 3.** Use automated defibrillator

**Step 4.** Maintain the above until help arrives

## Epileptic Seizure

Safety of patient and those attending the patient are important during a seizure attack in a dental clinic.

Sudden loss of consciousness  
Temporary apnoea and cyanosis  
Tonic and clonic jerking movements  
May become incontinent  
Tongue biting

- Stop the dental procedure; remove instruments from the mouth and surrounding
- Avoid and/or prevent patient falling from the dental chair (by lowering the chair if raised)
- Avoid and/or prevent patient injuring herself/himself from dental instruments and equipments
- Avoid restraining the patient unless essential to prevent injury

Call 000 if seizure persists for more than few minutes

### **If the seizure subsides:**

- Protect patient in 'recovery position'
- Check conscious state (responding to commands)
- Maintain airway
- Remove vomitus (if any) from the oral cavity by suction
- Keep under observation for 30 minutes
- Instruct the patient to report to his/her doctor about the incident and let the patient go home

## Inhalation and/or Ingestion of Foreign Object

If a dental instrument or object disappears into the throat (oropharynx) during dental treatment, one must pursue the following steps:

Stop the dental procedure, inform the patient on what has happened and try to calm the patient by providing reassurance

Look for the missing instrument/object in the oral cavity, in and around orofacial region, neck and drape.

Put the patient into an upright position

Check vital signs

Do not offer anything to drink

If the patient is coughing, encourage the patient to relax, cough and breathe deeply and observe for the missing object in the expectorant and spit (if any)

If the patient is not showing any discomfort or coughing, send the patient for a chest X-ray within the first hour since the object in the gastrointestinal tract will remain in the upper portion for an hour and may be detected in the radiograph.

**If the patient is showing signs of partial or complete respiratory obstruction  
(see below)  
CALL 000**

**Signs of partial obstruction**

Wheeze  
Stridor  
Laboured breathing  
Coughing spasms  
Cyanosis

**Signs of complete obstruction**

Inability to breath, speak, cry or cough  
Agitation, gripping of the throat  
Cyanosis  
Bulging of the neck veins  
Rapid development of respiratory failure > cardiac failure  
Loss of consciousness

*Source, Therapeutic Guidelines- Oral Dental*

**Partial obstruction:**

CALL 000  
Encourage coughing

**Total obstruction:**

CALL 000

Keep the patient in recovery position

Try to remove obstruction manually only if possible

Check breathing and if NO breathing,  
GIVE FIVE BACK BLOWS TO THE SPACE BETWEEN SHOULDER BLADES USING  
YOUR HEEL OF THE HAND

If NO breathing,  
GIVE FIVE HARD CHEST COMPRESSIONS  
(Same as cardiac compressions but much harder)

**Ambulance/Medical help is eminent**

If obstruction continues indicative of a cricothyroidectomy

## Stroke

If a patient shows signs of 'stroke', please follow the steps below:

CALL 000 FOR Ambulance

Stop the dental procedure

Administer oxygen

Maintain airway

## Ptosis of the Eye

Ptosis of the eye, sometimes accompanied by double vision, can be a complication of maxillary injections. If these symptoms should occur following treatment the following is the correct management:

- Reassure the patient that the symptoms will disappear when the anaesthetic ceases to act.
- Place an eye patch over the affected eye. These are available in the first aid kit on the clinic floor and you should ask the senior dental assistant for help.
- If the patient has double vision and no one to accompany them home arrange with the reception desk for a taxi to take them home, at the Griffith University Dental School expense.
- Instruct the patient to:
  - Remove the eye patch when the anaesthetic ceases to act. Inform the patient of the estimated time for this to occur, which will depend on the type of anaesthetic used.Contact the Dental Clinic should there be any further problems

# Asthma

Most asthma-related deaths occur outside the hospital.

Management.

Assess severity.

- Acute severe - patient unable to speak in complete sentences, pulse rate greater than 110 per minute, respiratory rate greater than 45 per minute.
- Life threatening asthma – “Silent chest”, cyanosis, sweating, hypercarbic flush, bradycardia/hypertension, confusion, agitation.
- If more than one feature is severe, or if any feature is life-threatening, arrange hospital transfer.

# Diabetes

The most common diabetic emergencies are:

- Low blood sugar – hypoglycaemia in patients on anti-diabetic medications.
- High blood sugar – hyperglycaemia, particularly diabetic ketoacidosis.

## Hyperglycaemia

Clinical symptoms include thirst, increased urine output and dehydration. A progressive reduction in conscious level ensues, with hypotension, and coma and cessation of urine output in severe cases.

Management

Primary assessment and resuscitation (DRS-ABC) to secure the airway, breathing and circulation.  
Transport to a hospital facility.

## Hypoglycaemia

Clinical symptoms of hypoglycaemia include: sweating, hunger, tremor, agitation.  
With progression: drowsiness, confusion and coma.

Assume that any diabetic with impaired consciousness has hypoglycaemia until proven otherwise.

Management

Conscious patients can usually be treated with rapid acting oral carbohydrates, e.g. fruit juice, packets of granulated sugar, glucose powder neat or dissolved in water. After ten minutes this short acting carbohydrate should be followed up with food which contains longer acting carbohydrate. It is important that the victim is not left alone until all danger of hypoglycaemia has passed. If the patient is unconscious, attend to the airway, breathing and circulation. Protect the victim from injury and call an ambulance (dial 111).

# Chest Pain / Myocardial Infarction

Victims usually begin with varying degrees of atheromatous coronary occlusion. Myocardial infarction is usually initiated by rupture or erosion of a thin cap which overlies these atheromatous plaques. Platelet adhesion and aggregation then occurs over the ruptured surface. The haemodynamic effects of this thrombus formation may lead to prolonged ischaemic symptoms and pain at rest. If the clot occludes the coronary artery a myocardial infarction occurs.

## Symptoms and Signs

- Persisting central chest pain, with possible radiation to the left or right arms, jaw, or neck.
- Pain is no longer improved with Glyceryl Trinitrate.
- Nausea, vomiting.
- A sense of impending doom.
- Restlessness.
- Shortness of breath.
- Pallor, cold sweaty skin.
- Pump failure: hypotension, raised venous pressure, tachycardia and possibly pulmonary oedema

## Management

### If acute MI is suspected:

- Give reassurance, and keep the patient warm.
- Sit the patient up if breathless.
- Lay the patient flat if he or she feels faint.
- If the patient has GTN tablets or spray, give one tablet to be chewed or one spray under the tongue.
- Repeat in five minutes; if pain is unrelieved, call an ambulance (dial 111).
- If the patient is not allergic to aspirin, give 300mg aspirin chewed or sucked.
- Continue monitoring level of consciousness and be prepared to initiate adult collapse guidelines if patient becomes unconscious.

# Vasovagal Syncope

Usually defined as a transient loss of consciousness due to cerebral ischaemia caused by a reduction in blood supply to the brain. Vasodilatation causes pooling of blood in the peripheries and vagal stimulation causes slowing of the heart. This combination causes a dramatic fall in blood pressure.

## Presentation

- Patient feels light headed or dizzy, possibly nauseous, uncomfortable or agitated.
- Appears pale and sweaty with a thready, slow pulse and hypotension.



### Management

#### **Vasovagal syncope in a fit, healthy young patient:**

- Lay the patient flat.
- Relieve any compression on the neck and maintain an airway.
- Raise patient's legs.
- Ensure the patient has access to fresh air.
- When consciousness is regained, patient should be kept supine, and reassured.
- Once pulse and blood pressure recover, slowly raise patient to seated position.
- Patients with significant medical problems, or when syncope is prolonged or complicated by seizure activity, should be transferred to a hospital environment for further assessment as indicated.

## Hyperventilation

Prolonged rapid deep breathing often in very anxious patients can lead to profound metabolic changes that may result in loss of consciousness. A fall in arterial carbon dioxide concentration causes cerebral vasoconstriction and respiratory alkalosis.

### Presentation

The patient may notice tingling of the fingers or lips, tetanic spasm of the peripheries, and dizziness. These symptoms tend to increase an anxiety and respiratory rate and depth. Eventually the patient will become unconscious due to a relative cerebral hypoxia. The patient is apnoeic for a period due to reduced respiratory drive with low arterial carbon dioxide concentration. As the arterial carbon dioxide level rises and cerebral vasoconstriction reverses, the patient starts breathing again and regains consciousness. Hyperventilation recommences, and the cycle continues with further loss of consciousness.

### Management

- Reassure patient.
- If patient is conscious, encourage re-breathing into a paper bag to increase inspired carbon dioxide.
- If patient is unconscious, maintain airway until consciousness is regained.
- Place in the recovery position and give reassurance, while the patient continues re-breathing into paper bag.

## Procedure for Calling an Ambulance

Call 000

# IDENTIFICATION OF PATIENTS

## CORRECT PATIENT, SITE AND PROCEDURE

### Introduction

All health services, including dental facilities, are required to comply with the Quality and Complaints Commission Act 2006. Principles number SSC\_1 – 9 mandates that health services have a policy, procedure and guidelines developed and implemented to ensure the correct patient receives the correct procedure on the correct site. The Health Quality and Complaints Commission recommends the following procedures and policy should be in place:

- Consent
- Identification of the Patient
- Mark site for surgery or other invasive procedures
- Team time out
- Appropriate diagnostic images are available prior to commencement of procedure
- Policy, procedures and guidelines are reviewed through audit and credentialing processes.

### Principles

- Wrong patient, wrong procedure and wrong site incidents can and must be prevented
- Responsibility for ensuring verification rests with all team members. However, the person in charge of the interventional procedure carries ultimate responsibility
- To the extent possible, the patient (or authorised representative) should be involved in site identification
- The person performing the procedure must review the following data after scheduling the patient for the procedure and prior to the appointment:
  - Radiographs and imaging reports
  - Pre-procedure history and other clinically relevant material
  - Consent and treatment plan.

### Clinical Procedures

1. The person escorting the patient from the waiting room to the clinic is to ask the patient their name
2. Clinician to ensure that correct patient has been called by asking patient their name for a second time
3. Close all previous records open in the computer and open the correct patients file. It is good practice to complete each patients record at the end of their appointment and then to close the file before the next patient is called
4. Review the patient's record
5. Ensure with the dental assistant that the correct radiographs are available and that they are correctly orientated.
6. Examine the dentition to verify that the correct radiographs are displayed
7. Before administering any medication, verify the following:
  - a. The patient (or authorized representative) is aware of the procedure that they have attended the clinic for – ask the patient to state what procedure they are expecting to undergo
  - b. The patient is aware on which tooth you will be working
  - c. The details provided by the patient correspond with the information in the record.

8. At the completion of the appointment discuss with the patient the proposed treatment for the next visit and record it in the clinical notes

### **Site Marking**

Site marking is recommended in most government documents and policies, however there does not appear to be a practical or reliable method to actually mark the teeth or oral mucosa. Consequently, it is important that all steps in this procedure are complied with and **all** members of the team take responsibility for ensuring correct procedures on the correct person.

### **Time Out**

A 'time out' is standard procedure for all interventions conducted under general anaesthetic or conscious sedation. However for procedures conducted under local anaesthesia no formal 'time out' is necessary.

### **Additional Information**

1. If the patient cannot speak English, an appropriate interpreter, family or friend should assist in the confirmation of information
2. At verification should the patient wish to alter the nature of their consent, the new procedure should be clearly documented in the file and appropriate consent obtained. (Students must obtain supervisor approval)
3. Any student or staff who become aware that the incorrect procedure is being carried out should inform the dentist and the procedure should cease immediately so that information can be reassessed and confirmed
4. Any incorrect procedure is a critical incident and must be reported according the policy for critical clinical incidents.

## LATEX ALLERGY

### What is latex?

Latex or rubber is a natural product obtained from the sap of the rubber tree (*Hevea brasiliensis*). Preservatives, stabilizers and antioxidants may be added during manufacture to assist its stability. It is used to manufacture various consumer products. A dry powder lubricant (usually cornstarch) is often added to prevent the rubber surfaces from sticking together. Allergic reactions can occur to latex protein as well as the chemical added to it, but not to cornstarch.

### Different kinds of latex allergy

There are three different kinds of adverse reactions to latex, although they do overlap to a certain degree. These include:

- **Irritant dermatitis** – characterised by crusty skin lesions. Irritant dermatitis isn't the same as latex allergy, because it can be caused by a wide range of other factors including washing with harsh soap or the action of sweat inside rubber gloves. However, irritant dermatitis is often a starting point for the development of latex allergy. Broken skin allows the absorption of latex. Without intervention, people with genetic susceptibility will progress from irritant dermatitis to latex allergy.
- **Allergic contact dermatitis** – this skin problem is caused by a reaction to the chemicals added to latex during processing, not to the latex proteins themselves. Typically, symptoms (including rough skin patches and a weeping rash) tend to develop a few days after exposure. Once again, this is not true latex allergy. However, the absorption of latex through broken skin can increase the risk of latex allergy in susceptible people.
- **Immediate-type latex allergy** – is genetically susceptible people, initial exposure to latex prompts the immune system to create antibodies. On subsequent exposure to latex, the body mounts an immune system response, which includes the release of histamine. This can cause a wide range of sudden reactions including hives, swollen lips and, in severe cases, anaphylaxis. Anaphylaxis, or anaphylactic shock, is an emergency and can be fatal.

### Management of irritant dermatitis to reduce the risk of developing latex allergy.

Repeated exposure to latex can escalate the immune system response, so avoidance is the best way to manage the condition.

- Use non-powdered gloves.
- Non latex gloves e.g. Nitrile or vinyl gloves are available for use.
- Always wash hands thoroughly after wearing gloves.
- Take care of your hands to ensure unbroken skin surfaces.
- Have skin rashes medically investigated
- Keep the use of latex products to minimum

## Guidelines to Latex Use and Products in Dentistry

GENERAL DENTISTRY	
a) Gloves	Use powder free gloves. Use non latex gloves (nitrile, vinyl) for individuals with documented latex allergy.
b) Rubber Dam	Rubber dam is a latex product Latex free dam is available for use on individuals with documented latex allergy.
c) Mouth props	Avoid using rubber mouth props.
d) Impression material	No contraindications – rubber based impression material are synthetic rubber.
e) Toothbrushes	Avoid toothbrushes with a rubber interdental pic and rubber handles.
f) Endodontic GP Points	GP points are derived from trees in the same botanical family as natural rubber, and there in lies the potential for cross allergy. This problem has been highlighted by a report which emphasises the problems with over filling root canals with GP points. If one can guarantee there is no over filling with GP then it can be used, however the potential for over filling and resulting allergic response must be remembered, particularly for patients with documented latex allergy
g) Endodontic rubber stoppers on files	Measure with a tweezers grip or make an informed assessment of risk for latex allergy individuals.
h) Orthodontic	Check head gear components for latex containing items. Elastic/surgical ligatures and power chain may be a problem – check with manufacturer. As an alternative, use wire ligatures. Check for rubber grips on orthodontic wire cutters, band removers and band placers for latex allergies.
i) Other dental products	Polishing discs have latex backing, probably low risk, and use with caution. Polishing cup 'prophy cup' – use a polishing brush.

Taking thorough medical histories from patients followed by avoidance of contact with potential allergens can minimise the possibility of adverse reactions.

If latex related complications occur during or after a procedure, manage the reaction and seek medical emergency assistance as appropriate.

Source: Web pages

ASCIA - Australasian Society of Clinical Immunology and Allergy inc. 'Guidelines to promote safe promote safe practice in the dental environment for latex allergic patients'. Last revised February 2005

Allergy Capitol - 'Latex Rubber Allergy' updated July 2003

Better Health Channel - Victorian Government Australia 'Latex Allergy' last reviewed June 2006

# ROLE OF CLINICAL SUPERVISORS & CLINICAL TUTORS IN THE GENERAL CLINIC

## Definitions

*Clinical Supervisor* – Responsible for overseeing a clinical session, including management of Clinical Tutors, students and patients.

*Clinical Tutor* – Under a clinical supervisor, is allocated students to supervise during a clinical session.

## General

Each clinical session will have a nominated Clinical Supervisor, usually, but not always, a School academic staff member, preferably a relevant Course Convenor.

The Clinical Supervisor/Tutor is responsible for the care and management of the patient, and must therefore be a fully registered dentist.

In addition, Clinical Supervisors will be responsible for supervising Clinical Tutors and students. The school tries to maintain a ratio of 1 Clinical Supervisor/Tutor to 6 students; therefore Supervisors should allocate approximately 6 students per Clinical Tutor. Supervisors should themselves be responsible for approximately 6 students. Clinical Tutors and Supervisors should not attempt to supervise many more students than this. It is unsafe to attempt to supervise 12 students because a Clinical Tutor has not arrived. Clinical Supervisors/Tutors should take responsibility for their allotted group of students for a whole session. Remaining with the same group for a session facilitates more meaningful assessment and helps to eliminate confusion. Clinical Supervisors should attempt to rotate the Clinical Tutors amongst all the students at succeeding sessions, so that all students may benefit from the input of different Tutors.

Supervisors and Clinical Tutors should arrive ten minutes prior to the start of a session and be prepared to remain until all the students have completed their patient's treatment satisfactorily and the records have been completed appropriately. This includes charging through fees (for private **as well as QH patients**). Clinical Tutors should also be prepared to stay for a short while following the completion of the session should the Clinical Supervisor wish to discuss with Tutors any issues which may have arisen during the session. Clinical Supervisor and Tutor pay rates include additional associated work time before or after a session.

## Efficiency

Clinical Supervisors and Tutors should assist students with utilising their time efficiently. Part of learning to be an oral health professional is to work quickly and efficiently. Some tips to assist with this:

- Talk to the student before the patient comes in to establish the activity that you expect the student to achieve that session;
- Providing clinical tips to the student before any procedure commences is useful;
- The post-it note system in the electronic record system is very useful for the student to record what he/she plans to do at the next session (these post-it notes are permanently recorded in the notes section of EXACT);
- Do not allow students to take as long as they like, give them a reasonable time and then check how they are progressing and assist where needed;
- Identify students who are having difficulties early on in the session;
- Approximately 30 minutes before the next appointment or before the end of the session ask the students to finish up. If a procedure cannot be completed 15 minutes before the end of a session, the supervisor must instruct the student to place a temporary dressing and continue during the next appointment.

## Consent

- It is extremely important that the patient understands what treatments they are to receive, how many appointments it might take and how much it is estimated it will cost them;
- You should ask the student to discuss these matters with the patient and you should be present while it is taking place, so that you can ensure the patient is receiving the correct information;
- Make sure that if there are alternative options for care that these are fully explained to the patient so that they have all the information they require to make their decisions;
- If patients ask for written quotes or information about their treatment plan these should be provided by the Clinical Supervisor;
- If a financial arrangement is to be made for a private patient, the financial administrator should be summoned to do so.
- At every appointment when you sign off for the student to commence treatment you should ensure that the patient understands what treatment they are receiving that day and that the student is treating the correct tooth, area and patient (both Clinical Supervisors and Clinical Tutors can sign off);
- Once comprehensive treatment plans have been approved and the permission to proceed obtained from the patient, there should be no changes made to the plan unless explained to the patient, written consent obtained and approved by a supervisor. The approving Clinical Supervisor or Clinical Tutor should, as far as possible, be prepared to administer the implementation of the particular plan or, through the Clinical Supervisor, to appoint another Clinical Tutor to continue to monitor the same treatment plan.



## Records

- All files of patients undergoing care should have a signed treatment plan and an OPG;
- You will need a good understanding of the Patient Management System (TITANIUM) so that you can assist the students. If you are having difficulties or are unsure please contact the Director of Clinical Operations, who will ensure that you receive any further training or support that you require;
- Records should be completed and signed off, including charging through the fees, at the end of the appointment prior to the patient going to the reception desk to make the next appointment;
- Records should be completed according to the policy which accompanies the Patient Management System Training Manual;
- There should be Notes on the patient record at the Notes tab for every appointment that the patient has, including Failed to Attend or Cancelled Appointment should the patient not arrive for their appointment;
- The key points of all conversations with patients, on the phone or face to face, should be recorded in the Notes;
- The disposal and ongoing management of the patient should be recorded e.g. work plan for next visit, recall interval or completed;
- Any email, letters or other printed information should be attached to the patient's file either by scanning or directly if in electronic format (this can be organised at the reception desk);
- Students should not phone patients directly themselves. This should be done by the Clinical Supervisor, Clinical Tutor or Dental Clinic Receptionist.
- Referrals to anybody to complete part of or the remaining part of the treatment plan must be co-ordinated and signed by the supervisor.
- Final year students must transfer their patients to a fourth year student to complete the treatment plan. This must also to be co-ordinated and signed by the supervisor.

## Medical History

- The information collected on the patient consent form should be entered into the medical history section of the record at the first appointment;
- These forms will not be available for sessions after the first appointment;
- Every tab in the Specialty Tab (medical history) section should be completed even if it is only to mark that there is no abnormality. Completion of this tab is an important training exercise to ensure that students learn to consider all aspects of a patient's health.
- It is particularly important that you ensure that medical alerts for the following conditions are placed on the record:
  - Allergies
  - Anticoagulant Therapy
  - Antibiotic Cover
  - Immunosuppression
  - CJDand that the nature of this problem is recorded in the accompanying text box.



## Occupational Health & Safety

- All students must abide by the School of Dentistry and Oral Health Dress Code. If students are not appropriately dressed and not wearing appropriate protective gear they should be sent off the clinic;
- Clinical Supervisors and Tutors must also abide by the School of Dentistry and Oral Health Dress Code;
- Students should be mindful of their own and other's safety at all times and if behaving inappropriately then they should be sent off the clinic;
- Should a student or a member of staff sustain a skin breach injury or be involved in any other incident you should ensure that the School policy is followed and the appropriate incident forms are completed. Members of staff will assist you with this process;
- Should you become aware of something which is likely to cause harm either to staff, patients or students you should report it to the Clinical Supervisor, Senior Dental Assistant or Director of Clinical Operations so that appropriate action can be taken to rectify the issue.

## Procedures and Assessment

- New Clinical Supervisors should consult with Course Convenors prior to their first session so that assessment criteria can be discussed and standardised;
- Clinical Supervisors must ensure that the appropriate assessment sheets for the students' sessions are filled in. The grades for each session form part of the students' ongoing assessment. The information on each sheet includes the Student Name, Patient Name, Date and the grades for the various clinical activities undertaken. Supervisors should ensure that all relevant fields are completed. On completion and after signed by the supervisor and student, the **supervisor** will hand the sheet in at the control room.
- In conjunction with the Course Convenor, Clinical Supervisors and Clinical Tutors will be involved in giving regular feedback to students on the progression of their clinical skills and competence.
- It is extremely important that Clinical Supervisors study the clinical guidelines for each discipline. These guidelines dictate the philosophy of the discipline and procedures that are allowed in the clinics. Any deferral from these guidelines will contribute to student's confusion.

**Key Contacts**

Appropriate Course Convenors and contacts:

**Year 2 Dental Students**

Dr Andrea Rung  
Phone: 07 567 80733

**Year 2 Oral Health Therapy Students**

Ms Bessie Evelyn  
Phone: 07 567 80769

**Year 3 Dental Students**

Prof Anut Itthagarun  
Phone: 07 567 80769

**Year 3 Oral Health Therapy Students**

Ms Bessie Evelyn  
Phone: 07 567 80769

Ms Leonie Short  
Phone: 07 567 80720

**Year 4 Dental Students**

Dr Lea Foster  
Phone: 07 567 80734

**Year 5 Dental Students**

Dr Mohammed Meer  
Phone: 07 567 80769

**Clinical Practice Manager**

Mary-Anne Clarke  
Phone: 07 567 80754

**Senior Dental Assistant**

Karen de Somer  
Phone: 07 567 80216

**Director of Clinical Operations**

Prof Theunis Oberholzer  
Phone: 07 567 80759

## SPECIALITY REFERRAL

The managing clinician may refer a patient to another professional because:

- The treatment required is outside the managing clinician's expertise. This may particularly be the case when students are managing patients.
- The dentist or patient desires a second opinion
- The pathology is unusual and requires specialist attention or services
- For a particular procedure or investigation e.g. OPG x-ray, blood test

The managing clinician is responsible for ensuring that the patient attends the specialist service. Unless the patient is referred for total management of their care, the managing clinician is responsible for all other aspects of their treatment plan are completed.

Referrals at Griffith University Dental Clinic may be internal or external. It should be remembered that patients have the right to choose their own specialist

### External Referrals

External referrals should be recorded in the patient's clinical notes. A referral letter should accompany the patient to the specialist and a copy of this letter should be attached to the patient record in the Patient Management System. Patients may also choose to visit a specialist externally even if the service is available at Griffith. Reception staff will assist with making appointments at external specialists. The following services are not currently available at Griffith and will require external referral:

- Advanced Radiography
- Endodontics
- Orthodontics

### Internal Referrals

Internal referrals should be recorded in the patient's clinical notes. Appointments should be made by the reception desk. Specialist services are available internally for the following:

- Post graduate periodontics
- Dento-alveolar oral surgery
- Post graduate implants
- Post graduate prosthetics
- Removable prosthodontics (Prosthetists)
- Specialist prosthodontics
- Specialist Oral Medicine
- Specialist Oral Pathology

## INTERNAL SPECIALITY REFERRAL

The discipline head (or delegate) must be involved in the treatment plan in one of the following:

### Periodontal Treatment (Prof Ivanovski)

#### Referral to postgraduate specialist training program – DCLinDent (Perio)

Patient can be referred from the GradDipDent to the DCLinDent program after a charting/risk assessment with the perio supervisor.

#### Guidelines for referring to specialist training DCLinDent(Perio) program:

Patients with the following characteristics are suitable for the DCLinDent (Perio) specialist periodontics training program:

1. Moderate to advanced periodontitis - patients with generalized pocketing > 6mm. These patients should be advised that there will be a cost associated with this treatment. For example one visit of debridement is in the order of \$150 per debridement visit, i.e. \$600 for a full mouth debridement by quadrant over 4 visits. If the disease is more localized, fewer appointments will be needed and the cost is reduced. Detailed costs will be discussed at the time of consultation. These patients should be referred to the postgraduate clinic and should present there with an OPG.
2. Any other periodontal disease requiring specialist periodontics consultation (e.g. aggressive periodontitis, mucogingival defects, vertical periodontal defects, non-responsive/severe gingivitis)
3. Implant patients - any patients who are candidates for and interested in implant treatment should be booked in the postgraduate clinic on Thursdays. The cost of treatment starts from \$3200 for a restored implant fixture. More accurate costs will be given following consultation. The patient should present with an OPG. Any patient requiring specialist periodontics assessment, who is aware of the financial considerations, can be directly booked with the postgraduate students

### Implantology (Prof. Ivanovski / Prof. Mack)

Please note the following about implantology activities at the school:

4. Dental implantology is available at GH1.
5. The costs start from \$3000 for a single restored crown. A definitive cost will be provided at the time of the implant consultation.
6. Initially, all implantology consultation and treatment planning should be carried out in the implantology clinic on Thursdays 8-11 and 12-3. The consultations will be carried out by the DCLinDent (Perio) students with periodontics, oral surgery and prosthodontic input, as required.

### Oral Medicine (Dr. Nair)

Oral Medicine is a speciality that bridges the gap between medicine and dentistry mostly by means of non-surgical procedures with additional biopsy service for orofacial soft tissue diseases. In addition to the following, students/tutors must always refer to the 'Guidelines for Oral Medicine' regarding any orofacial diseases and orofacial manifestations of a suspected systemic disease or disorder.

The major scope of Oral Medicine is as follows. Detailed description of these can be found in “Guidelines for Oral Medicine”:

1. Oral mucosal red lesions
2. Oral mucosal white patches
3. Vesicles and bullous lesions of the orofacial structures
4. Pigmented lesions of the orofacial region
5. Xerostomia, sialadenitis and other salivary gland diseases
6. Orofacial pain (other than dental) and cranial nerves evaluation
7. Taste disorders and altered movements and sensation of the orofacial structures
8. Infective diseases (bacterial, fungal, viral and other)
9. Cervical lymphadenopathy
10. Suspected drug-induced orofacial manifestations/diseases
11. Orofacial management of cancer patients (any cancer including organ transplantation and haematopoietic stem cell transplantation)
12. Oral biopsy service

Points to remember:

- Innocent-looking lesions in the oral cavity may turn out to be a much sinister malignant or potentially malignant disease.
- Time is very important with regard to ‘referral’ to Oral Medicine Clinic or an Oral Medicine consult because of the fact that, an early diagnosis is critical in the management of serious diseases.
- Please refer to the ‘Guidelines for Oral Medicine’ for more information on how to proceed with an emergency Oral Medicine consult in the student clinic.
- If a referral is required, students must write a referral letter to the ‘Oral Medicine Clinic’ using the template available from the Dental Reception, 2<sup>nd</sup> floor, GH1 with the permission of the tutor-in-charge as soon as possible.

### **Operative Dentistry (Prof. Oberholzer)**

Students should consult the discipline head (or delegate) to sign off the restorative part of the treatment plan. For Details please see guidelines for restorative dentistry.

### **Endodontology (Dr. Foster)**

Acute odontogenic pain – emergency treatment only, to relieve pain and stabilize/temporize the tooth, can be undertaken under the supervision of any sessional. No attempts to establish working lengths or any preparation of canals should be carried out at this stage. Pulpotomy or Pulpectomy to relieve pain only, is permissible.

Students should then consult the discipline lead (or delegate) about patients with the following problems as part of an overall treatment plan:

1. Any teeth with irreversible pulpitis
2. Any non-vital teeth
3. Any teeth with an incomplete apex that are requiring Pulpotomy or other Endodontic therapy

4. Any Dental Trauma Cases
5. Any teeth requiring inter-disciplinary treatment that includes Endodontics
  - Apical surgery
  - Periodontal surgery – root resection, hemi-section
  - Perio/Endo
  - Restorative/Prosthodontic rehabilitation – De-coronation, Crowns, Inlay/Onlays, RPD and FPD abutments and elective devitalisation
6. Any suspected cracked teeth
7. Endodontic re-treatment

### **Maxillo-facial surgery (Dr. Meer)**

1. Any patient, requiring surgery, on multiple medications or on any chronic medications.
2. Any patient with a compromised medical history. For detail please (**see guidelines in OMFS**).
3. Patients with impacted teeth, whether they require removal or not. This is not limited to third molar teeth, but includes any impacted teeth.
4. Any patient with pericoronitis, requiring assessment of their third molar teeth for removal. The teeth need not be impacted.
5. Any patient exhibiting any signs of pathology, either clinically or radiologically, intra- or extraoral, soft tissue or hard tissue (co-consulting specialist in oral medicine, (**see guidelines in oral medicine**)).
6. Any patients with retained roots, or teeth with abnormal anatomy that may present a challenging extraction.
7. Any patient requiring inter-disciplinary treatment, particularly full arch dental clearances and the placement of immediate dentures (after consulting a specialist in prosthodontics, (**see guidelines in prosthodontics**)).
8. Any tooth requiring apical surgery.
9. Any patient with a dentofacial skeletal deformity (this includes syndromic patient and cleft patients).
10. All patients requiring bone augmentation.
11. Patients who are candidate for implant placement due to soft or hard tissue defects. This includes intraoral and extraoral implant placement e.g. implant placement for prosthetic fingers or ears (co-consult specialist in prosthodontics).
12. All patients where the placement of an obturator may require surgery (co-consult specialist in prosthodontics).
13. All patients sustaining dental or maxillo-facial trauma.
14. Any patient with TMJ symptoms that needs surgery (co-consult specialist in prosthodontics, (**see guidelines prosthodontics**)).
15. Patients requiring the closure of oro-antral communications.

### **Prosthodontics (Prof. Mack)**

1. Any patient where full clearance is planned (from less than two remaining teeth) including prior to any tooth extraction.
2. Any TMJ patient or any patient that shows more than 2 symptoms during the screening.
3. Any patient who has lost more than 2mm in vertical dimension or needs any temporary device (splint) to open the bite.
4. Any patient with occlusal disturbances, elongated teeth, severe tooth wear or any occlusal adjustment (e.g. reshaping Spee- or occlusal curve)

5. Any patient who needs any restoration in a centric position
6. Any patient who needs restorations and having Angle class 2 or class 3 or partial or total crossbite
7. Any patient requesting a bridge with more than 3 units per quadrant
8. Any patient with decay under any crown or bridge abutment
9. any patient requesting more than 2 single crowns / veneers / onlay's per quadrant
10. Any design of a CrCo-RPD
11. Any patient with severe alveolar bone resorption receiving a complete denture
12. Any patient with xerostomia who needs any prosthodontic treatment
13. Any patient where **implants** are involved in the treatment (co-consulting specialists in OMFS or Periodontology)
14. Any patient with severe general diseases (e.g. physically compromised patients, cancer patients, patients after radiation, co-consulting specialists in Oral Medicine)
15. Any patient where obturators are needed (co-consulting specialist in OMFS)
16. Any patient with broken denture, RPD, FPD (broken ceramics, de-cementation etc), to analyse the fatigue.
17. Any FPD or RPD that needs to be repeated within a 2 years period.

## TREATMENT PLANNING GUIDELINES

### General note:

This is the procedure for treatment plan on adults or on any treatment on **permanent teeth**. The purpose of the paper form is to support student during the preparation of their cases which are supposed to be presented either in oral or written form.

The paper form of the treatment plan is based on the information from the PMS and will be filled out after all requested information were transferred into PMS. In the future and after an update of PMS the treatment planning will be completely done electronically. The only paper form that remains - when we will use the PMS treatment plan - is the financial consent form and the final treatment plan (Appendix 1).

### Treatment planning:

- Fill out patients name, DOB, gender
- Give information whether patient is a QH or private patient
- Fill out chart using same colour code as in patient's computer system. Consider fillings, RCT, caries, missing teeth, crowns, pontics, vitality test, degree of tooth mobility, etc.
- Fill out PSR-(Periodontal Screening and recording) Index according to **guidelines (see page 179) Perio / PSR. All patients must have a PSR.**
- Report briefly the patient's **major dental concern** (e.g. pain 46, need for new denture, etc.)
- Report briefly on **medical history** (might be taken from form that patient has filled out at first visit)
- Report briefly on family history including family dental history
- Report briefly on findings from any available x-rays, such as OPG, PA, Bitewings
- Report briefly on any smoking cessation actions taken by the patient (where applicable)
- Report caries risk assessment as per the Cariogram. For details, please see: **Caries Risk Assessment (page 176)**
- TMJ:
  - report about history of TMD problems (e.g. since when clicking, pain, stiff chewing muscles etc)
  - muscles: palpate M. masseter, M. temporalis, M. sternocleidomastoideus, M. occipitalis, M. pterygoidalis and report which muscles are showing mild, moderate, severe pain on palpation
  - joints: report which (right or left), since when (weeks, months, several years) and in which mouth opening phase (initial, intermediate, terminal) clicking or popping occurs during palpation
  - mobility lower jaw: report about range of mouth opening (normal or limited) and report deflexion or deviation during mouth opening
  - abrasions: report of any abrasions on occlusal surfaces on any teeth
  - dysfunction: summarize the above criteria whether the patient is having a TMJ dysfunction and tick the "yes" or "no" box. If "yes" is ticked determine which other diagnostic steps is needed by ticking the boxes.



- Report any other additional findings like extra oral lesions, intra oral lesions, piercing, abnormalities, etc.
- Diagnosis / risk management: summarise the findings above in a diagnosis, like “adult patient with low caries and periodontal risk” or “young adult patient with high caries risk, TMJ symptoms and severe periodontal risks”.

**Treatment Plan:**

The 3 treatment options are divided into several disciplines and order of treatment. Each segment must be signed off according to the guidelines below and according to specialty referral.

1. Emergency / pain relief  
**(signed off by any staff member or sessional)**
  1. Abscess
  2. Pulpitis
  3. Exo
  4. Other oro-facial pain
  5. Trauma
2. Complete examination including PSR etc
  1. If patient is NOT a perio patient as defined by PSR screening: scale, clean, complete charts + risk assessment, OH instructions, **(signed off by any staff member or sessional)**
  2. **If patient is defined as perio patient** – sent patient to perio clinic for full charting, risk assessment and periodontal treatment plan **(see guidelines for Perio treatment ) (page 118)**
3. Restorative and endo treatment. This treatment can be completed concurrently.
4. Restorative treatment
  1. Prior to restorative treatment scale, clean, complete charts + risk assessment and OH instructions must be completed
  2. Determine the order of restorative tx to be done according to their priority (needs to be discussed with supervisor in clinics)
  3. Filling material to be used **see guidelines for operative dentistry and specialty referral of when to see Prof. Oberholzer for approval (page 79)**
  4. For endo please see guidelines for endo tx and specialty referral **(Dr. L. Foster) (page 67)**
5. Perio treatment
  1. Prior to any perio tx, active caries should be controlled
  2. for perio tx **see guidelines for perio treatment and specialty referral (Prof. Ivanovski or delegate) (page 164)**
6. Further extractions (e.g. wisdom teeth, heavily subgingival decayed teeth) **but save (prosthodontic) strategic important teeth. see guidelines for extractions and specialty referral (Dr. Meer) (page 95)**
7. Splint therapy if necessary (reason for splint must match with charts / tx plan, tx plan for splint should be described in pros part of tx plan). **see guidelines for specialty referral, (Prof. Mack)(page 164)**

8. Pros tx (including implant planning (**Prof. Mack/Prof. Ivanovski in implant clinic**)).  
see lecture and rules of prox tx planning and RPD design
  - a. see lecture and **guidelines for implant planning ( to be added)**
  - b. complete RPD design after consulting with Steve Griffin
9. To be signed off and assessed by involved disciplines as described previously.

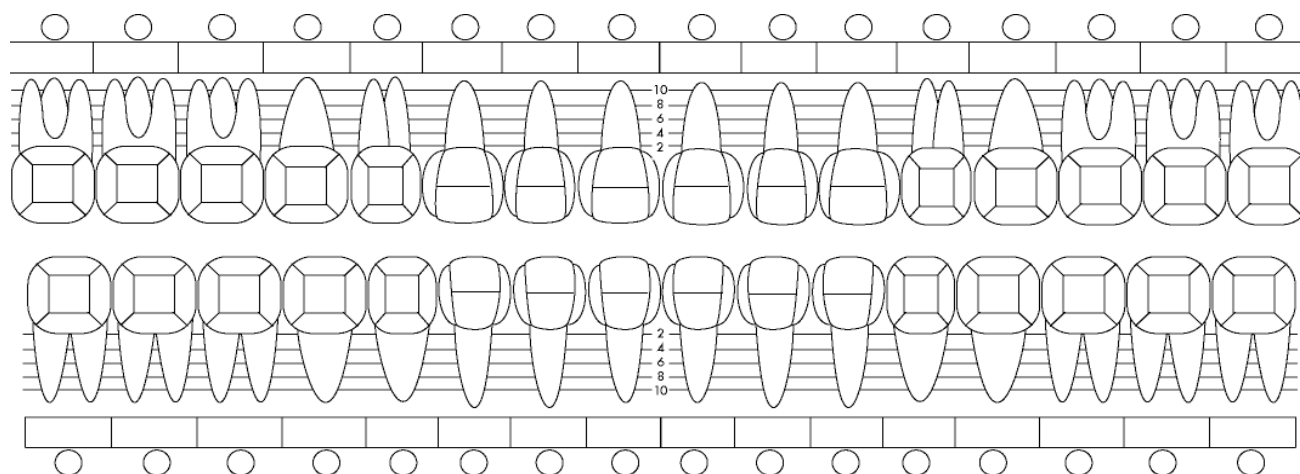
**Final treatment plan:**

1. Student discusses the 3 treatment options with the patient. Once the patient agrees on an option, the student fills out the sheet "Final treatment plan (page 5)". The final treatment plan **must be signed by the patient, together with the financial consent form.** The Patient gets a copy of both, the final treatment plan will be scanned and saved in the patients records.
2. The student **MUST** transfer the written final treatment plan into the EXACT patients file computer system (once it is done, any supervisor will sign this on the patient management system).
3. The student keeps a copy of the final tx plan to be signed off before ("approval") and after ("signature") each treatment. The final treatment plan must be displayed to supervisor during each treatment of the patient. The order of treatment must be followed except due to certain, approved and agreed changes in the treatment plan.
4. For costs that are NOT covered by Queensland Health (e.g. Crown, Bridge, Implants, Perio tx) or for any other private patients and when a payment plan is requested a financial consent form needs to be completed. For details please see **guidelines for financial consent and payment plans. (page 11,18).**

# Treatment planning

Patients name, DOB, gender: \_\_\_\_\_

Private patient or QH patient? \_\_\_\_\_



## PSR

S1	S2	S3
S4	S5	S6

**Major dental concern** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Medical History** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Family History** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Diagnosis x-Rays** \_\_\_\_\_  
**(OPG, PA, Bitewing)** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Caries risk assessment**  
(attach printout of  
Cariogram to this  
treatment plan)

**Actual chance to avoid new caries:** %  
Diet: %  
Bacteria: %  
Susceptibility: %  
Circumstances: %  
Summary of caries risks assessment:

**TMJ**

History? no ☐ yes ☐

Muscles no ☐ yes ☐

Joint? no ☐ yes ☐

Mobility lower jaw no ☐ yes ☐

Abrasions no ☐ yes ☐

**Dysfunction** no ☐ yes ☐

Extended functional status ☐

Occlusal analysis in articulator ☐

**Additional findings**

**Diagnosis /  
Risks management**

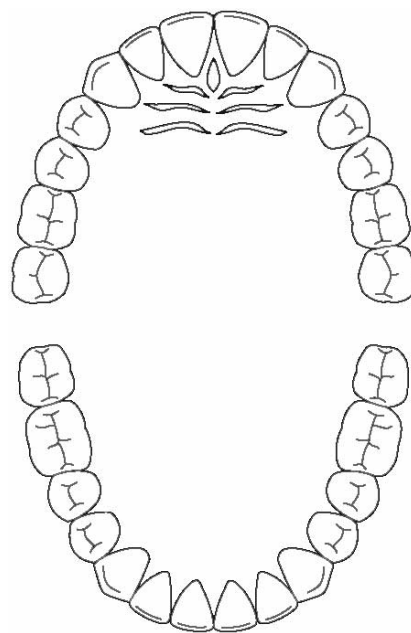
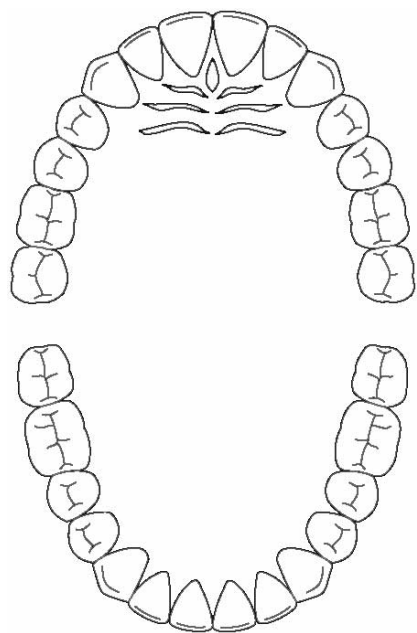
## Treatment plan

3 Treatment options :		
( 1 ) Emergency tx:	( 2 ) Emergency tx:	( 3 ) Emergency tx:
_____	_____	_____
_____	_____	_____
_____	_____	_____
Scale + polish, OH instructions:	Scale + polish, OH instructions:	Scale + polish, OH instructions:
_____	_____	_____
_____	_____	_____
Restorative / Endo tx:	Restorative / Endo tx:	Restorative / Endo tx:
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
Perio:	Perio:	Perio:
_____	_____	_____
Extractions:	Extractions:	Extractions:
_____	_____	_____
_____	_____	_____
_____	_____	_____
Pros / TMJ tx:	Pros / TMJ tx:	Pros / TMJ tx:
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
Total costs option 1: _____	Total costs option 2: _____	Total costs option 3: _____
Costs for patient: _____	Costs for patient: _____	Costs for patient: _____

**Assessment and approval of Discipline Heads or delegate (if involved):**

Em/OH	Perio	OMFS	Resto	Endo	Pros
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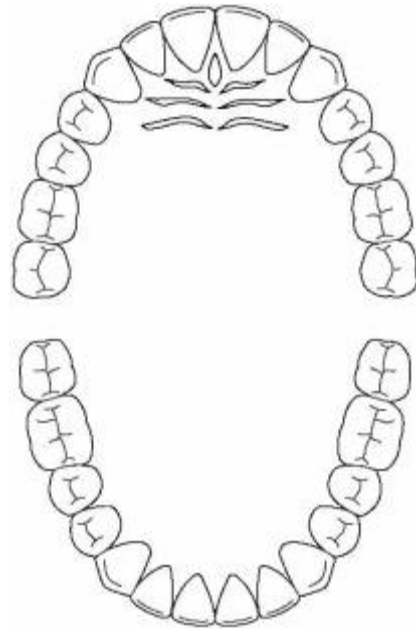
## RPD Design



## Final treatment plan

**Patients name, DOB:** \_\_\_\_\_

<b>Emergency tx:</b>	<b>Approval</b>	<b>Signature grade</b>
<b>Scale+polish, OH instr:</b>		
<b>Restorative / Endo tx:</b>		
<b>Perio:</b>		
<b>Extractions:</b>		
<b>Pros / TMJ tx:</b>		
<b>Estimated total costs:</b>		
<b>Costs for QH patient:</b>		



Treatment plan transferred to PMS

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Date / Signature Tutor

Patient agreed treatment plan and costs (date/signature) \_\_\_\_\_

**Changes of tx plan during current tx:**

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Changes approved by relevant discipline head or delegate: \_\_\_\_\_

Changes of treatment and costs agreed by Patient: \_\_\_\_\_

## Example treatment plan (3 options)

### Treatment plan



3 Treatment options :		
( 1 ) Emergency tx:	( 2 ) Emergency tx:	( 3 ) Emergency tx:
16 exo	16 Exo	16 exo
15 endo	15 endo	15 endo
scale + polish, OH instructions:	scale + polish, OH instructions:	scale + polish, OH instructions:
yes	yes	yes
Restorative / Endo tx:	Restorative / Endo tx:	Restorative / Endo tx:
26 no amalgam	26 no ceramic inlay	26 no ceramic inlay
23 dp composite	23 dp composite	23 dp composite
11 mp composite	11 mp composite	11 mp composite
13 b composite	13 b composite	13 b composite
17 mod amalgam	17 mod core paste	17
Perio:	Perio:	Perio:
no	no	no
Extractions:	Extractions:	Extractions:
18, 28	18, 28	18, 28
Pros / TMJ tx:	Pros / TMJ tx:	Pros / TMJ tx:
15 VMK	bridge 15 - 17	16 Implant
		17 VMK
Total costs option 1: 2500,-	Total costs option 2: 5000,-	Total costs option 3: 6500
Costs for patient: 1000,-	Costs for patient: 3800,-	Costs for patient: 4800,-

Assessment and approval of Discipline Heads or delegate (if involved):

Em/OH	Perio	OMFS	Resto	Endo	Pros
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## Example

### Final treatment plan



Patients name, DOB: Tom Cat 01.08.1980

**Emergency tx:**

$$\frac{16 \text{ exo}}{15 \text{ endo}}$$

### Approval

Signature  
grade

**scale+polish, OH instr:**

45

Restorative / Endo tx:

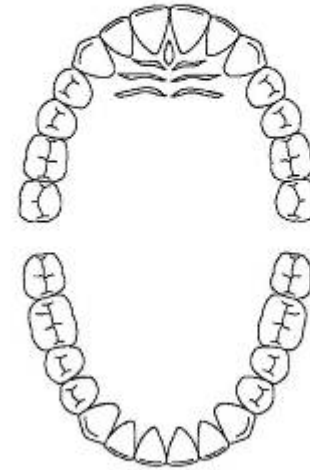
26	mo	amalgam
23	dp	composite
11	mp	composite
13	b	composite
17	mod	amalgam

**Period:**hO

**Extractions:**

12, 28

**Pros / TMJ tx:**

TS VMK

Treatment plan transferred into PMS

01.01.1634

Date / Signature Tutor

estimated total costs:

25005

Costs for QH patient:

1000

Patient agreed treatment plan and costs (date/signature)

T. Cat

**Changes of tx plan during current tx:**

Changes approved by relevant discipline head or delegate: \_\_\_\_\_

Changes of treatment and costs agreed by Patient: \_\_\_\_\_

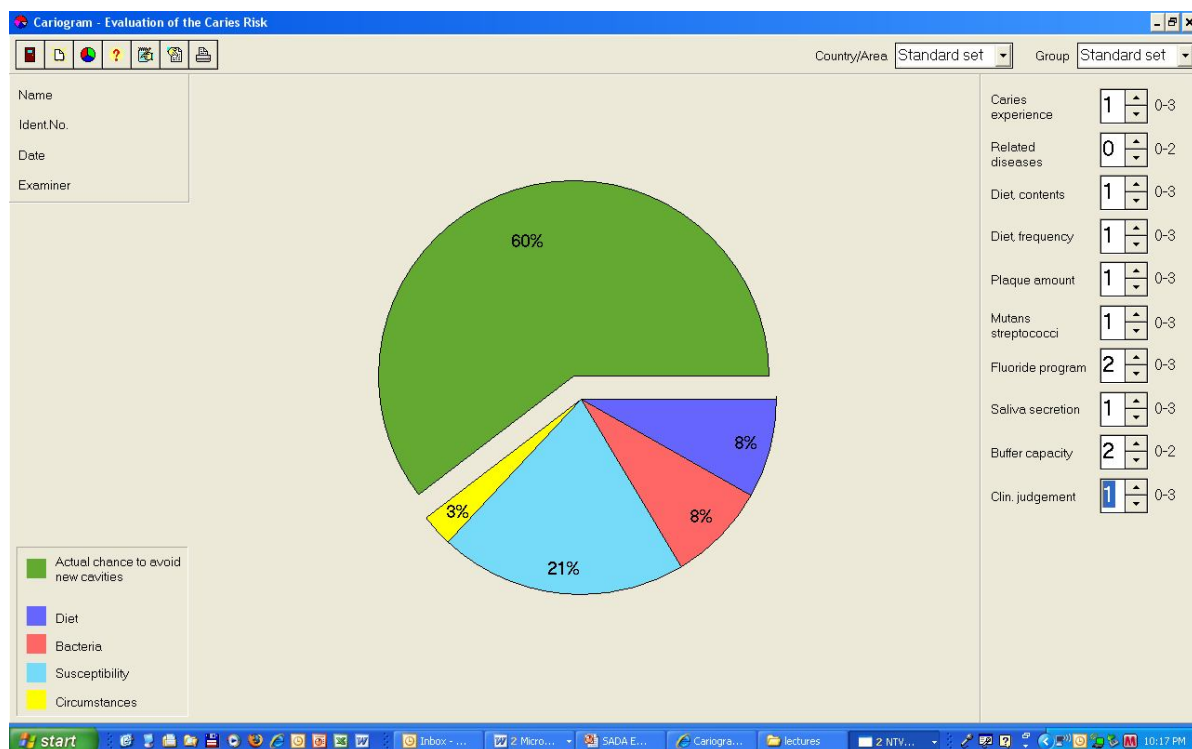
## Caries Risk Assessment

The Cariogram software was developed by the Department of Cariology, Malmö University in Sweden. This software maps the interaction between caries related factors to form a risk profile of the patient which aids the clinician to explain caries risk to a patient. The Cariogram expresses caries risk as “the change to avoid new decay” (i.e. to avoid getting new cavities or ‘holes’) in the near future. The Cariogram software will be available as part of the PMS software.

### Interpretation of the Cariogram:

The Cariogram, a pie circle-diagram, is divided into five sectors (see figure below):

- **Dark blue sector (Diet):** Based on a combination of *diet contents* and *diet frequency*.
- **Red sector (Bacteria):** Based on a combination of *amount of plaque* and *mutans streptococci*
- **Light blue sector (Susceptibility):** Based on a combination of *fluoride program*, *saliva secretion* and *saliva buffer capacity*
- **Yellow sector (Circumstances):** Based on a combination of past *caries experience* and *related diseases*
- **Green sector: Estimation of the *Actual chance to avoid new cavities*:** The bigger the green sector, the better from a dental health point of view. **A small green sector means low chance of avoiding caries = high caries risk.** For the other sectors, the smaller the sector, the better from a dental health point of view.



## Cariogram Criteria:

**Note:** A Cariogram will only appear when at least 7 values have been entered. You do not need to enter all values.

Score	Explanation
<b>Caries experience: Caries prevalence</b>	
0 = Caries free and no fillings	Completely caries-free, no previous fillings, no cavities or M-missing teeth due to caries.
1 = Better than normal	Better than normal - better status than normal, for that age group in that area.
2 = Normal for age group	Normal status for that age group.
3 = Worse than normal	Worse status than normal for age group, or several new caries-lesions the last year.
<b>Related general diseases: From medical history</b>	
0 = No disease	There are no signs of general diseases of importance related to dental caries. The patient is 'healthy'.
1 = Disease/conditions, mild degree	A general disease, which can indirectly influence the caries process, or other conditions which can contribute to higher caries risk, e.g. poor eye-sight, inability to move.
2 = Severe degree, long-lasting	Patient could be bed-ridden or may need continuous medication for example affecting the saliva secretion.
<b>Diet: Content</b>	
0 = Very low fermentable carbohydrate	Very low fermentable carbohydrate, extremely 'good' diet from the caries point of view. Sugars or other caries-inducing carbohydrates on a very low level. Lowest lactobacillus class needed to support a zero.
1 = Low fermentable carbohydrate, 'non-cariogenic' diet	Low fermentable carbohydrate, 'non-cariogenic' diet, appropriate diet from a caries perspective. Sugars or other caries inducing carbohydrates on a low level. Diet, as for an 'informed' group.
2 = Moderate fermentable carbohydrate content	Moderate fermentable carbohydrate content. Diet with relatively high content of sugars or other caries inducing carbohydrates.
3 = High fermentable carbohydrate intake inappropriate diet	Inappropriate diet from a caries perspective. High intake of sugar or other caries inducing carbohydrates.
<b>Diet: Frequency</b>	
0 = Maximum three meals per day (including snacks)	Very low diet intake frequency, a maximum of three times per 24 hour as a mean under a longer time period.
1 = Maximum five meals per day	Low diet intake frequency, a maximum of five times per 24 hour, as a mean.
2 = Maximum seven meals per day	High diet intake frequency, a maximum of seven times per 24 hour, as a mean.
3 = More than seven meals per day	Very high diet intake frequency, a mean of more than seven times per 24 hour.
<b>Plaque: % plaque index calculated from number of teeth with plaque / total number of teeth</b>	
0 = Extremely good oral hygiene	Less than 5% of teeth covered with a film of plaque. Very 'oral hygiene conscious' patient, uses both tooth brush and interdental cleaning.
1 = Good oral hygiene	Between 5 and 15% of teeth covered with a film of plaque adhering to the free gingival margin and adjacent area of the tooth. The plaque may be seen by using the probe on the tooth surface.
2 = Less than good oral hygiene	Between 15% and 30% of teeth covered with a moderate accumulation of soft deposits, which can be seen with the naked eye.
3 = Poor oral hygiene	More than 30% of teeth covered with an abundance of soft matter within the gingival pocket and/or on the tooth and gingival margin. The patient is not interested in cleaning the teeth or has difficulties in cleaning.
<b>Mutans streptococci: Based on Vivadent Dentocult SM (Strip mutans) test</b>	
0 = Strip mutans class 0	Very low or zero amount of mutans streptococci in saliva. Only about 5% of the tooth surface colonised by the bacteria.
1 = Strip mutans class 1	Low levels of mutans streptococci in saliva. About 20% of the tooth surfaces colonised by the bacteria.

2 = Strip mutans class 2	High amount of mutans streptococci in saliva. About 60% of the tooth surfaces colonised by the bacteria.
3= Strip mutans class 3	Very high amounts of mutans streptococci in the saliva. More than 80% of the tooth surfaces colonised by the bacteria.
<b>Fluoride programme</b>	
0 = Receives 'maximum' fluoride programme	Fluoride toothpaste plus constant use of additional measures - tablets or rinsing and varnishes. A 'maximum' fluoride program.
1 = Additional F measures, infrequently	Fluoride toothpaste plus some additional measures - tablets or rinsing and varnishes infrequently.
2 = Fluoride toothpaste only	Fluoride toothpaste only, no supplements.
3 = Avoiding fluorides, no fluoride	Avoiding fluorides, not using fluoride toothpastes or other fluoride measures.
<b>Saliva secretion: Amount</b>	
0 = Normal saliva secretion	Normal saliva secretion, more than 1.1 ml stimulated saliva per minute.
1 = Low, 0.9 - 1.1 ml stimulated saliva/min	Low, from 0.9 to less than 1.1 ml stimulated saliva per minute.
2 = Low, 0.5- 0.9 ml saliva/min	Low, from 0.5 to less than 0.9 ml stimulated saliva per minute.
3= Very low, Xerostomia, <0.5 ml saliva/min	Very low saliva secretion, dry mouth, less than 0.5 ml saliva per minute; problem judged to be long-standing.
<b>Saliva buffer capacity: Based on GC Saliva-Check Buffering Capacity test</b>	
0 = Adequate, Saliva-Check green	Normal or good buffer capacity, Saliva pH 6.8 – 7.8
1 = Reduced, Saliva-Check blue	Less than good buffer capacity, Saliva pH 6.0-6.7
2= Low, Saliva-Check red	Low buffer capacity, Saliva pH < 6.0
<b>Clinical judgement: Based on opinion of the dental examiner ('Clinical feeling')</b>	
0 = More positive than what the Cariogram shows based on the scores entered	The total impression of the caries situation, including social factors, gives a positive view, more positive than what the Cariogram seems to indicate. The examiner would like to make the green sector bigger, i.e. improve the 'Chance to avoid caries' for the patient.
1= Risk according to the values entered	The total impression of the caries situation, including social factors, gives a view, in line with what the tests and the other factors seem to indicate and points to the same caries risk as in the Cariogram. The examiner does not have any reason to change the program's inbuilt evaluation.
2= Worse than what the Cariogram shows based on the scores entered	The total impression of the caries situation, including social factors, points in the direction of increased caries risk. Less than good compared to what the tests and the other factors seem to indicate. The examiner would like to make the green sector smaller, which is to reduce the 'Chance to avoid caries'.
3 = Very high caries risk, examiner is convinced that caries will develop, irrespective of what the Cariogram shows based on the scores entered	The total impression of the caries situation, including social factors, is very bad. The examiner is very sure that caries will occur the coming year and would want the green sector to be minimal, irrespective of the Cariogram results. The examiner overrules the program's inbuilt estimation.

**A copy of the Cariogram needs to be attached to the treatment planning form of the patient. To print a completed Cariogram, you need to copy it into a Word document. When the Cariogram is filling up the screen, press 'Print screen', then press 'Ctrl + C', then open a page in the Word program and paste it into a page with 'Ctrl + V'.**

## Periodontal Screening

All patients should be screened for the presence of periodontal disease using the Periodontal Screening and Recording Index. The Periodontal Screening and Recording Index (PSR) is based on the CPITN (Community Periodontal Index of Treatment Needs) proposed by the WHO in the 1980's. This index is used to ensure all patients have a periodontal record and if required, full periodontal examination. A simple grid is used to record the worst score per sextant, an asterisk (\*) providing a cue that a sextant contains signs of previous or existing periodontitis or requires more thorough investigation such as:

- Furcation involvement
- Recession > 3.5 mm
- Mobility
- Mucogingival problems

A code should be recorded for all sextants containing 2 or more teeth by:

- Probing circumferentially around all teeth
- Recording only the worst score for each sextant
- Sextants with single teeth, if not scheduled for extraction, should be included in the adjacent sextant

The following table indicates the appropriate score for varying degrees of periodontal disease:

Code	Periodontal Status
0	Healthy Periodontium (PD<3.5mm)
1	Bleeding / Plaque Present (PD<3.5mm)
2	Calculus Detected (PD<3.5mm)
3	Probing depths 4-5mm
4	Probing depths > 6mm

Following screening, if two or more sextants have a score of 3 or 4, the patient is identified as 'periodontitis' patient and a full periodontal charting is required. This is followed by a periodontal risk assessment and a periodontal treatment plan.

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## ORGANISATIONAL STRUCTURE

