

# DENTISTRY AND THE GP

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HEALTHY COMMUNITIES AND  
WORLD CLASS HEALTHCARE

CARING | PASSIONATE | TRUSTWORTHY

# What do you see in your surgery?

Pain?

Swelling?

Repeated courses of Antibiotics?

Trauma?

Loose/broken dentures?

# Topics

- Dental emergencies
- Medical complications and dentistry
- Pregnancy and dental care
- Oral health and children
- Accessing public dental care
- Resources

# Dental Emergencies

94 dental presentations to ED at Bendigo Health in the last 4 years.

35% result in ward admissions and/or GA.

2 Patients with life threatening dental infections admitted to ICU in 2014-both almost died.

# Dental Emergencies

Significant increase in the number of private dental practices in Bendigo in the last 5 years.

Significant increase in the number of public dental chairs in Bendigo in the last 15 years.

Yet....ED dental presentations have increased in the last 5 years.

# Presentations to ED

	PatientCount
2008-09	4
2009-10	6
2010-11	8
2011-12	17
2012-13	21
2013-14	20
2014-15	18
<b>Grand Total</b>	<b>94</b>

- About 20 people a year present to A&E with dental complaints.
- **35% of these are then admitted to the Ward.**
- Patients tend to be quite desperate by the time they present to A&E.

# Dental Presentations to GP

- Acute Dental Pain
  - Swelling/Cellulitis.
  - Abscessed tooth
  - Severe pain after tooth extraction at the dentist.
- Broken tooth, or lost/broken filling
- Wisdom teeth
- Maxillofacial Trauma
- Tooth avulsion/Dental Trauma
- Problems with dentures

# Acute Dental Pain

Throbbing, aching, waking up at night=necrotic tooth. Often described as an abscess.

Pus from the tooth pulp puts pressure on the apical bone causing pain.

Pus may break through the bone and cause swelling/cellulitis.

Occasionally can lead to extra oral fistula.

**Rx: Antibiotics, analgesics, referral to dentist.**

Skapedis, T. et al. Australasian Emergency Nursing Journal (2012) 15, 14—22

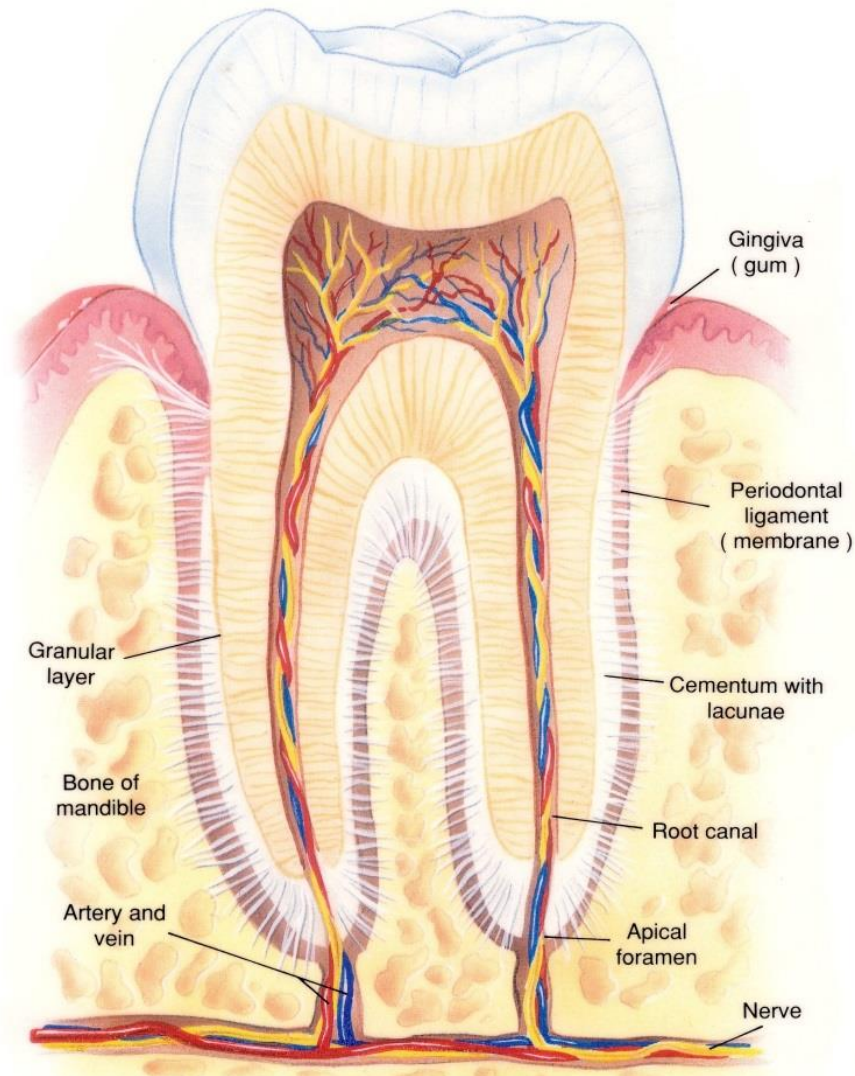


# Acute Dental Pain

**Rx: Antibiotics, analgesics, referral to dentist.**

Metronidazole + Amoxicillin/Augmentin or  
Clindamycin for Penicillin allergic patients

Skapedis, T. et al. Australasian Emergency Nursing Journal (2012) 15, 14—22



# Extra Oral Fistula-2 years duration



# Facial Swelling/Pain

Patients do not have to wait 'until the swelling goes down' before having the tooth out.

It is uncommon not to obtain sufficient local anaesthesia when swelling/infection present.

Removal of source of infection is recommended ASAP, especially if there are medical co-morbidities such as diabetes.

# Acute Dental Pain

Severe pain after recent dental extraction.

Typically is a 'dry socket'

Localised osteomyelitis resulting from the premature loss of the blood clot from the extraction site leading to exposed bone.

Common in smokers

**Rx: Analgesics, referral to dentist.**

# Broken Tooth/Filling

May be sharp to the tongue

May be sensitive to hot/cold/sweet

May be the result of caries-may lead to necrotic tooth if untreated.

If accompanied by severe pain/swelling, tooth may already be necrotic.

**Rx: Refer to dentist**

# Wisdom teeth

Typically erupt between 16-21 years of age

Pain from 'teething'

Pain from pericoronitis-infection of the gum  
around the partially erupted tooth

Pain from caries-necrotic tooth.

**Rx: Refer to dentist.**



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# Wisdom teeth

Close proximity to inferior alveolar nerve carries risk of parasthesia.

Referral to Oral and Maxillo Facial Surgeon may be necessary.

Public cases referred to Royal Dental Hospital Melbourne. Wait of 12 months, no guarantee of GA.

Private cases can be managed in Bendigo by Mr Ian Poker.

# Maxillofacial Trauma

Managed by Oral and Maxillo facial Surgeon.

# Tooth avulsion

Trauma to the teeth-teeth either loose, broken or completely out of the mouth (avulsion)

Store teeth in milk or saline

Reimplant ASAP-within 15 min if we want to save them

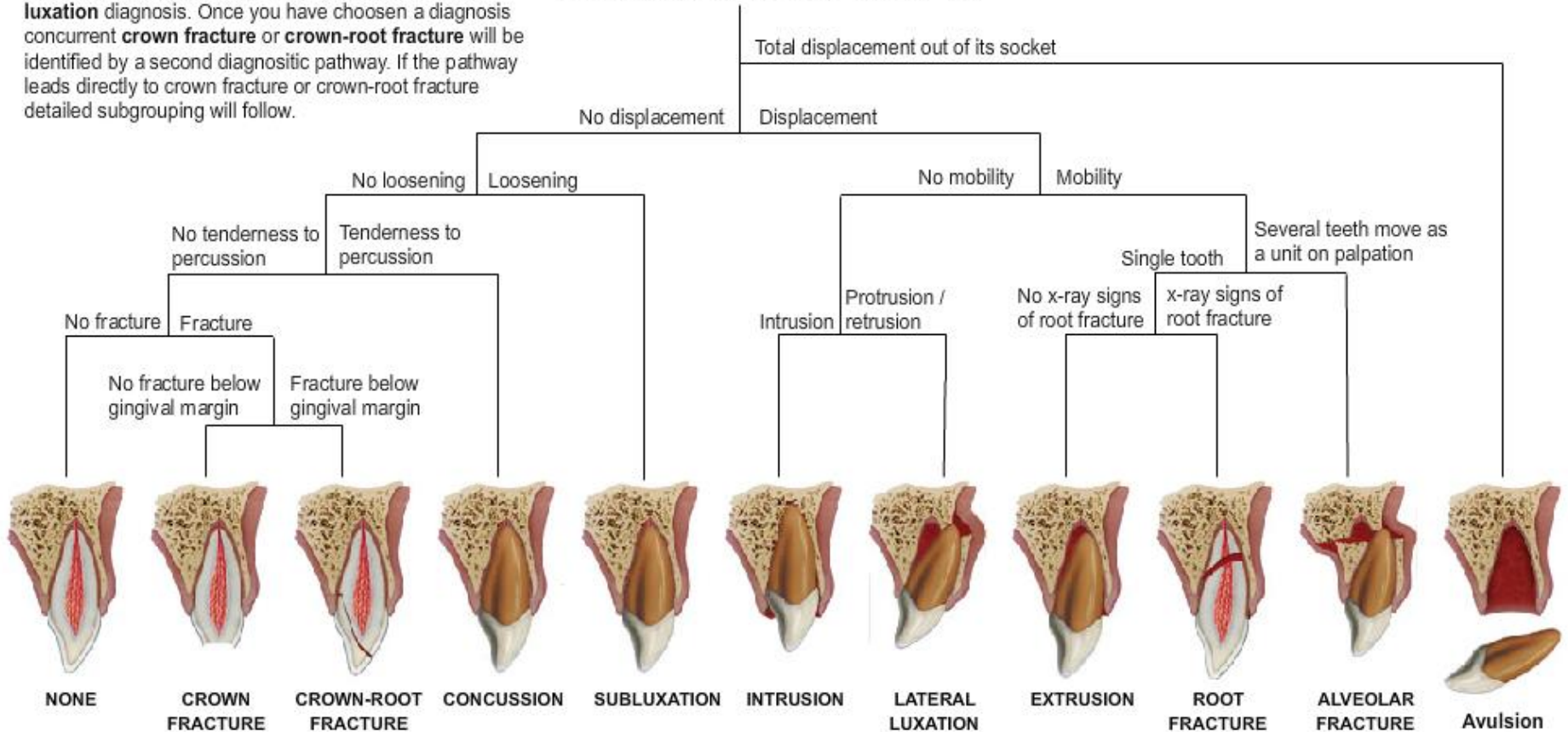
**Rx: Refer to dentist**

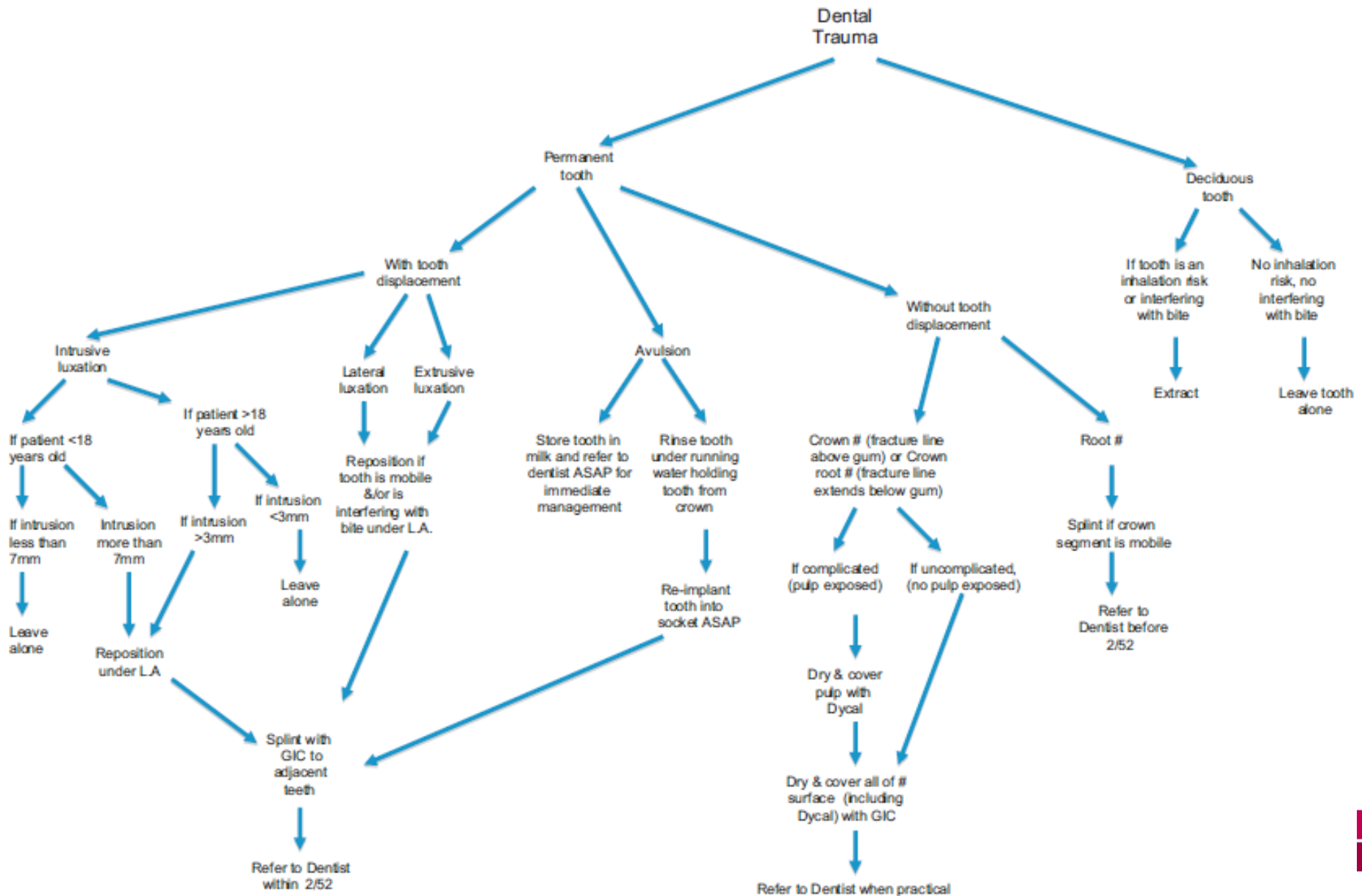
<http://www.dentaltraumaguide.org/>

# <http://www.dentaltraumaguide.org/>

## TRAUMA PATHFINDER

The diagnostic pathway starts by identifying the main **luxation** diagnosis. Once you have chosen a diagnosis concurrent **crown fracture** or **crown-root fracture** will be identified by a second diagnostic pathway. If the pathway leads directly to crown fracture or crown-root fracture detailed subgrouping will follow.





# Pregnancy

- 25% of women of reproductive age have untreated dental caries.
- Hormonal changes may result in gums that bleed more easily.
- Pregnancy does not ‘leech’ calcium from teeth, nor does it contribute to tooth decay.
- Dental treatment can be safely provided during pregnancy, including dental x-rays.

# Pregnancy

- 30% of women of reproductive age suffer from periodontitis.
- Although not definitive, there is growing evidence suggesting advanced periodontitis during pregnancy may be associated with preterm or low birth weight babies and pre-eclampsia.
- Advanced periodontal disease is uncommon-significant genetic component to it.

# Pregnancy

## National Antenatal Care Guidelines.

<http://www.health.gov.au/internet/main/publishing.nsf/Content/phd-antenatal-care-index>

### Recommendation

- At the first antenatal visit, advise women to have oral health checks and treatment.
- Treatment can be safely provided during pregnancy.
- Pregnancy does not causes dental problems.
- Tell the dentist they are pregnant.



# Pregnancy

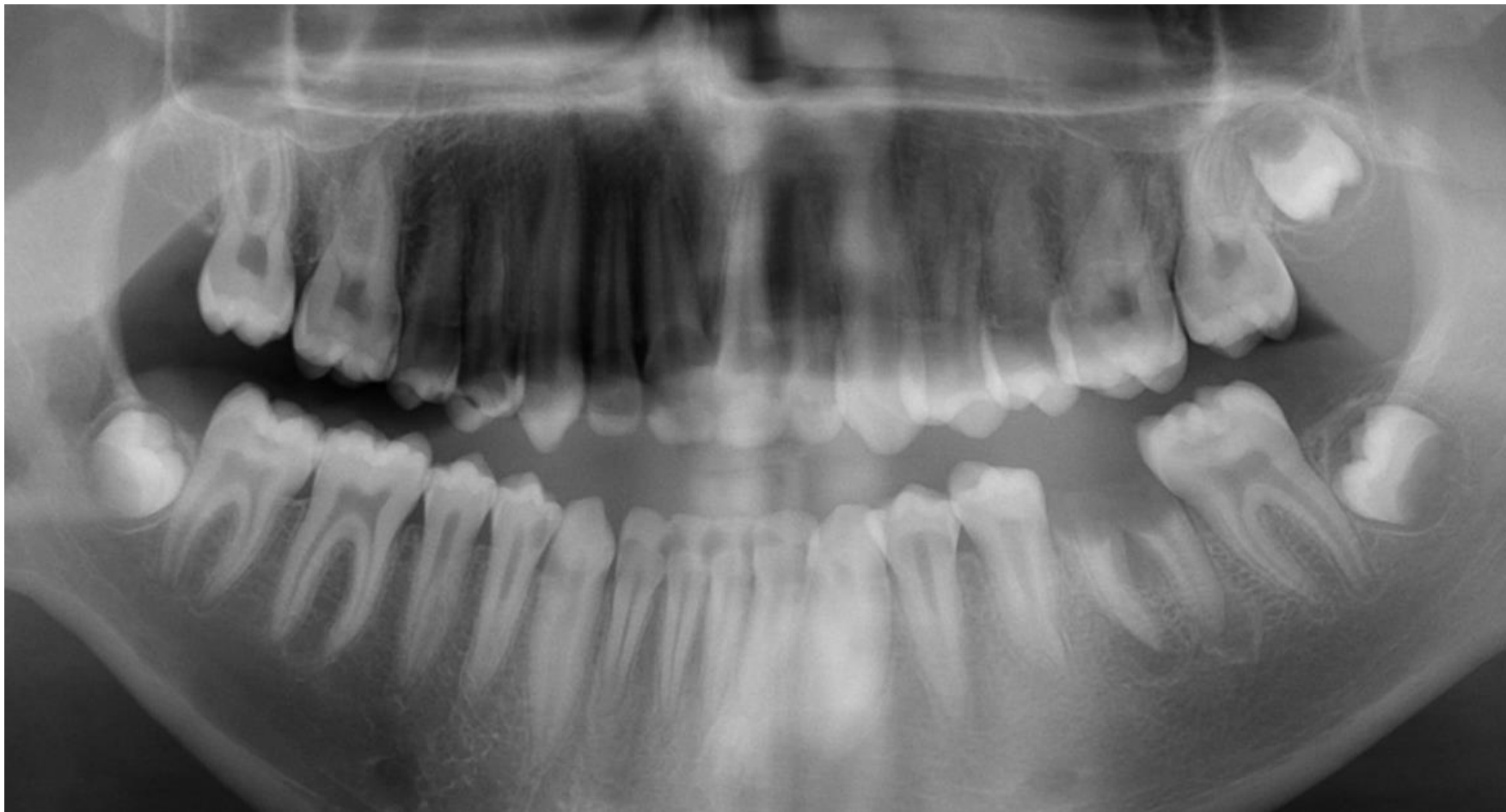
- Pregnant patients with a Concession Card are eligible for **priority** access to dental care at public clinics.
- They do not have to wait on the waiting list for a check up, fillings etc...
- \$26.50 per visit, to a max of \$106.

# Pregnancy

- There is no danger to mother or baby from dental x-rays or dental treatment during pregnancy.
- Tooth decay is an infectious disease (Strep mutans) and can be passed from mother to child by shared eating implements and close contact.
- The earlier this bacteria is transferred, the greater the risk of childhood caries.

# How old is this patient?





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# Children and Oral Health

Over 70 per cent of Victorian children under five have never visited a dentist [i], and yet in a child's first year of life they see a general practitioner almost 11 times [ii]. Supporting general practitioners and practice nurses to incorporate oral health when seeing families with young children could help to tackle Australia's most common chronic illness, tooth decay.

# Children and Oral Health

Almost 50% of 6 year olds have tooth decay.

10% of 4-6 year olds have more than 9 teeth affected by tooth decay-a small minority have a larger amount of caries.

Oral disease is largely preventable, but many children still suffer unnecessarily from the pain and complications of dental caries (decay).

# Infant Dental Screening

<http://www.healthysmiles.org.nz/assets/video/download/ItI-infant.mp4>

# Toddler Dental Screening

<http://www.healthysmiles.org.nz/assets/video/download/ItI-toddler.mp4>



# Pre-schooler Dental Screening

<http://www.healthysmiles.org.nz/assets/video/download/ltl-preschooler.mp4>

# Oral Health Advice to Parents?

- No sleeping with a bottle or breast.
  - Nursing Caries
- Water or plain milk to drink only.
- No flavoured milk.
- No cordial.
- No fruit juice (not even watered down).
- No coke or soft drink.

# Oral Health Advice to Parents?

- Abstinence never works... Water or plain milk to drink may not be possible.
- Compromise:
  - Diet Cordial.
  - Diet Soft Drink.
  - Diet Energy Drinks.

# Oral Health Advice to Parents?

- No Toothpaste until 18mths of age.
- Low fluoride tooth paste from 18mths to 6 years of age.
- Adult toothpaste from 6 years of age.
- Soft tooth brush, twice daily.
- Encourage first dental visit at 3 years of age.
  - Early and regular dental visits reduces dental anxiety and normalises dental treatment.

# Accessing Dental Care for Children

Children and young people are **priority patients** and do not have to go on the waiting list to receive **Public** dental care.

- o All children aged 0 – 12 years can access Public dental care. They don't need a Concession Card.

# Accessing Dental Care for Children

Children and young people are **priority patients** and do not have to go on the waiting list to receive **Public** dental care.

- o Young people aged 13 – 17 years who are Concession Card holders or dependents of Concession card holders can access Public dental care.

# Accessing Dental Care for Children

- Young people aged 13 – 17 years who do not have a concession card can access public or private dental care with the Child Dental Benefits Scheme.
- \$1,000 to use over 2 years if they have Family Tax Benefit A.
- Need to have a current Medicare Card.

# Accessing Dental Care for Children

- All children and young people up to 18 years of age in residential care provided by the Department of Human Services (DHS).
- All children enrolled in special or special development schools.
- All youth justice clients in custodial care, up to 18 years of age.



# Medical Complications to Dental treatment.

- Antibiotic prophylaxis.
- Bisphosphonates.
- Difficulties achieving haemostasis.
- Long term corticosteroids.
- Diabetes.

# Medical Complications to Dental treatment.

## Antibiotic prophylaxis:

2gm Amoxil or

600mg Clindamycin 1 hour prior to dental treatment

# Medical Complications to Dental treatment.

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)
- rheumatic heart disease in high-risk patients [[NB2](#)]

# Medical Complications to Dental treatment.

Prophylaxis is not recommended for patients with other forms of valvular or structural heart disease, including mitral valve prolapse

# Medical Complications to Dental treatment.

## **Bisphosphonates.**

Osteonecrosis of the alveolar bone or jaw after extractions

Higher risk with IV Bisphosphonates.

Risk 0.6-1.0%

# Medical Complications to Dental treatment.

## Difficulties achieving haemostasis.

We use localised haemostatic measures, rather than ceasing the medication.

# Medical Complications to Dental treatment.

**Long term corticosteroids.**

Double the dose before and after dental extraction.

# Medical Complications to Dental treatment.

Diabetes.

Lots of post op complications, esp if poorly controlled.



# For Interest...

Fluoride In the water reduces caries by 20-40%

- X** It is one of the chemicals that is used to make Prozac and is part of the government conspiracy to control the population.
- ?** It causes dental fluorosis and damages kids teeth.

- Mildura 2010
- Red Cliffs 2010

• Robinvale 2006

• Towns with water fluoridation

• Towns without water fluoridation

• Natural fluoride in the water

• Formally requested to commence water fluoridation

• Swan Hill 2010

• Kerang 2010

• Cohuna

Cobram Yarrowonga

Echuca 1978

Numurkah

Barnawartha 2009

Rutherglen

Wodonga 2007

Warracknabeal

Wangaratta 2007

Kaniva

Nhill

Kyabram 2010

Tatura

Shepparton

Benalla

Beechworth

Horsham 2006

St Arnaud

Bendigo 2002

Euroa

Benalla 2009

Myrtleford

Bright

Mount Beauty

Stawell

Maryborough

Castlemaine 2008

Seymour 2009

Mansfield

Ararat

Kyneton 2002

Woodend

Broadford

Alexandra

Daylesford

Kilmore

Wallan 2006

Casterton

Ballarat 2009

Gisborne 2004

Melbourne 1977/Mornington Peninsula 1978

Orbost

Hamilton 2009

Bacchus Marsh 1962

Bairnsdale 2010

Melton 1972

Warragul 2006

Moe 2006

Maffra 1976

Sale 2006

Lakes Entrance 2010

Geelong 2009

Traralgon 2006

Morwell 2006

Portland

Camperdown

Colac 2010

Torquay 2009

Drouin 1974

Port Fairy 2008

Apollo Bay

Phillip Island 2009

Inverloch

Leongatha

Yarram

Wonthaggi

Korumburra

# Meth Mouth



# Complications of drug abuse

Dry mouth

Poor self care

Staggeringly high caries rate

Priority patient if a front tooth is broken down to the gum-line or missing.

Priority patient if mental health patient with case worker.

# Presentations to A&E

- ED at BHCG has undertaken training in the management of dental emergencies and dental trauma in 2014.
- They have developed their skills in managing dental emergencies and have sourced the Dental Emergency Kit, developed by the Rural Doctors Network in NSW.
- We have developed a pathway with ED to enable them to refer patients who present with pain to the public dental clinic.

# NSW Rural Doctors Network

The screenshot shows the NSW Rural Doctors Network website. At the top, there is a navigation bar with links for Home, Upcoming CPD Conferences, About Us, FAQs, Links, Site Map, Search, and My RDN Login. Social media icons for Facebook, Twitter, LinkedIn, YouTube, and Email are also present. The main header features the RDN logo and the tagline 'supporting rural health in NSW Australia' over a photo of two women in a clinical setting. Below the header is a dark green navigation menu with categories: GENERAL PRACTICE & DOCTORS, LOCUMS, OUTREACH SERVICES, EARLY CAREER DOCTORS, NURSING & ALLIED HEALTH, ABORIGINAL HEALTH, STUDENTS & SCHOLARSHIPS, and NEWS & PUBLICATIONS. The left sidebar contains a list of menu items: GPs and Doctors, Employers, Partnerships, CPD/Education, Resources & Reference, Rural Medical Families, and Profiles & Quotes. The main content area displays a breadcrumb trail: >GENERAL PRACTICE & DOCTORS > Resources & Reference > Dental Kit. The title is 'Emergency Dental Kits for rural GPs'. The text explains that rural primary-care clinicians need support resources for dental emergencies. It describes the 'Emergency Dental Kit' developed by Dr Tony Skapetis, which is part of an education program. The kit is distributed on a cost-recovery basis and contains materials for emergency dental repair and a manual. Contact information for Dr Tony Skapetis and Rose Ellis is provided.

Home Upcoming CPD Conferences About Us FAQs Links Site Map Search My RDN Login

NSW RURAL DOCTORS NETWORK

supporting rural health in NSW Australia

GENERAL PRACTICE & DOCTORS LOCUMS OUTREACH SERVICES EARLY CAREER DOCTORS NURSING & ALLIED HEALTH ABORIGINAL HEALTH STUDENTS & SCHOLARSHIPS NEWS & PUBLICATIONS

GPs and Doctors >  
Employers >  
Partnerships >  
CPD/Education >  
Resources & Reference >  
Rural Medical Families >  
Profiles & Quotes >

>GENERAL PRACTICE & DOCTORS > Resources & Reference > Dental Kit

## Emergency Dental Kits for rural GPs

Rural primary-care clinicians need knowledge and support resources when faced with dental emergencies.

### Emergency Dental Kit

The Emergency Dental Kit has been developed by Dr Tony Skapetis, Clinical Senior Lecturer in the Faculty of Dentistry at Sydney University, with support from the NSW Rural Doctors Network (RDN). The aim of the kit is to assist rural GPs in the treatment of dental emergencies where no dentist is available.

The kit is part of an education program that includes comprehensive upskilling through a series of regional workshops, developed and implemented by Dr Skapetis. Once doctors have completed the upskilling, their practice or emergency department is eligible to purchase the kit, which the NSW Rural Doctors Network (RDN) distributes on a cost-recovery basis. The kit contains the materials required to perform an emergency dental repair along with a detailed, illustrated manual.

View the Emergency Dental Kit and its contents.

For more information about the education program, please email Dr Tony Skapetis.

For information on how to purchase the kit, please email Rose Ellis at RDN.

# Training Package for ED

<http://aci.moodlesite.pukunui.net/course/view.php?id=37>

# Ambulatory Care Sensitive Conditions

- ACSCs are hospitalisations that are potentially avoidable through public health interventions, early disease management (usually provided in ambulatory settings such as primary care) and community support.
- Oral health has a considerable impact on the number of hospital admissions for ambulatory care sensitive conditions (ACSCs).



# Ambulatory Care Sensitive Conditions

## All Individual ACSCs for selected year

Statistics results for:	
Report By	PCP
Geographical Area	Bendigo-Loddon PCP
Sex	Persons
Standard Population	2011
Age Groups	All Age Groups
Time Interval	2013-14

### All individual ACSCs for selected year

	Number of Admissions	Standardised Rate per 1,000 Persons	Lower limit of 95% CI	Upper limit of 95% CI	Average Bed days	Total Bed Days
Diabetes complications	2238	17.47	16.77	18.18	5.79	12963
Chronic Obstructive Pulmonary Disease (COPD)	509	3.88	3.55	4.22	5.34	2719
Dental conditions	345	3.04	2.71	3.36	1.10	380
Pyelonephritis	364	2.98	2.67	3.29	3.44	1253
Congestive cardiac failure	387	2.89	2.61	3.18	7.23	2799
Asthma	304	2.66	2.36	2.96	1.67	507
Cellulitis	239	2.00	1.75	2.26	5.18	1238
Convulsions and epilepsy	200	1.75	1.51	1.99	2.18	435

# Ambulatory Care Sensitive Conditions

- Oral health related conditions account for the highest rate of ACSCs for under-18-year-olds and the second highest rate of ACSCs for all ages in Victoria.
- Preschool aged children are the predominant group affected. The Region's admission rate is significantly higher than the state average.

# Ambulatory Care Sensitive Conditions

## All Individual ACSCs for selected year

Statistics results for:	
Report By	PCP
Geographical Area	Bendigo-Loddon PCP
Sex	Persons
Standard Population	2011
Age Groups	00-04
Time Interval	2013-14

All individual ACSCs for selected year						
	Number of Admissions	Standardised Rate per 1,000 Persons	Lower limit of 95% CI	Upper limit of 95% CI	Average Bed days	Total Bed Days
Asthma	60	8.15	6.10	10.21	1.50	90
Ear, nose and throat infections	37	5.03	3.41	6.64	1.30	48
Dental conditions	36	4.89	3.30	6.49	1.00	36
Convulsions and epilepsy	31	4.21	2.73	5.69	1.35	42
Pyelonephritis	10	1.36	0.52	2.20	3.40	34

**Notes:** CI - Confidence Interval

\* In the interest of privacy, the output is suppressed when less than 5 cases are reported

# Community Dental Services

## Anne Caudle Centre

### Level 1 and 7

- 11 dental chairs used by qualified dentists, prosthetists and oral therapists.

### Level 5 and 6

- 20 chairs used by dentistry and oral therapy students from LaTrobe University.

# Community Dental Services

## Anne Caudle Centre

Level 5 and 6

- Students provide General Care
- Much shorter wait list and **no cost** if seeing dental students.
- Students provide full range of treatments.

# Community Dental Services

- **Emergency care** -relief of pain.  
Provided on the day a patient calls.  
Cost \$26.50
- **General Care** -Waitlist of up to 2 years, cost \$26.50 per visit up to a max of \$106 per course of care.

# Community Dental Services

## Emergency care

- We offer treatment for toothaches every day.
- Patient to call first thing in the morning to be booked into our emergency clinic at 1:15pm. Patients are seen on a 'first come' basis and relief of pain is provided.
- Patient must be in pain
- \$26.50
- Referral not necessary, but medical summary may be of benefit.

# Community Dental Services

## General Care

- Approx. 1800 people on the waitlist for a check up, clean, fillings and dentures.
- Wait of up to 2 years, cost \$26.50 per visit up to a max of \$106 per course of care.
- Dentures, root canal, fillings and cleanings provided.
- Medical referral not necessary.



# Community Dental Services

## Priority Patients

Do not need to wait for General Care, can bypass the waiting list:

- Aboriginal and Torres Strait Islander
- Refugee and Asylum Seeker

# Community Dental Services

## Priority Patients

Do not need to wait for General Care, can bypass the waiting list:

- Mental health client with a letter of recommendation from their case worker
- Pregnant women
- Children

# Community Dental Services

## Priority Patients

Do not need to wait for General Care, can bypass the waiting list:

- Intellectual disability
- Homeless or at risk of homelessness
- Missing a front tooth

# Community Dental Services

## Priority Patients

Medical history or medical conditions do to provide priority access to General Care.

**Common dental problems for which patients may present to their medical practitioner (Table 13.21)**

Presenting problem	Comments
<i>apprehensive patients—the 'dental phobic'</i>	<ul style="list-style-type: none"> <li>the medical practitioner must liaise and work with the dentist</li> </ul>
<i>bleeding gums (may be spontaneous)</i>	<ul style="list-style-type: none"> <li>by far the most common cause is <a href="#">periodontal disease</a></li> <li>leukaemias and other malignant conditions are possible but unusual</li> <li>some drugs can alter the appearance of the gingivae (eg phenytoin, cyclosporin)</li> <li>consultation with the patient's dentist and/or periodontist is required</li> </ul>
<i>sore areas beneath dentures</i>	<ul style="list-style-type: none"> <li>examine the sore area to assess the possibility of malignancy</li> <li>the denture may need simple adjustment; refer to a dentist</li> <li>annual oral examination needed (wherever possible by a dentist)</li> </ul>
<i>paraesthesia</i>	<ul style="list-style-type: none"> <li>simple causes are rare if no recent dental or surgical procedure has been done</li> <li>causes include malignancy, multiple sclerosis</li> <li>diagnosis may be difficult</li> </ul>
<i>temporomandibular disorders</i>	<ul style="list-style-type: none"> <li>symptoms include jaw clicking, pain and locking</li> <li>more common in females</li> <li>management is usually conservative; refer to a dentist (see also <a href="#">Temporomandibular disorders</a>)</li> </ul>
<i>deranged occlusion (teeth not biting together normally)</i>	<ul style="list-style-type: none"> <li>almost pathognomonic of a jaw fracture (see <a href="#">Maxillofacial trauma</a>)</li> <li>give antibiotics, assess tetanus immunisation status</li> <li>refer to a specialist</li> </ul>

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