ORAL HEALTH CARE FOR OLDER PEOPLE IN NSW

A toolkit for oral health and health service providers
In recent years there has been a trend for older people to retain a greater number of natural teeth as they age – a trend that will continue as younger generations age.

These teeth may have had significant treatment over a lifetime increasing the risk of complications and requiring a higher level of intervention and prevention. An increasing ageing society, with higher retention rates of natural teeth, will require new oral health promotion actions to be developed and implemented.

Oral Health Care for Older People in NSW: a toolkit for oral health and health service providers (The Toolkit) recognises that clinical conditions in older persons share risk factors and cross discipline-based boundaries because of their multifactorial nature. The Toolkit contains oral health information that can be useful in encouraging a partnership approach to the oral and general health needs of older people.

The Toolkit is not intended to give information or guidance about how to diagnose or treat older adults. Rather, it is a guide on how to prevent and minimise health problems associated with older people.

This document encourages: (i) shared responsibilities from all stakeholders; (ii) a commitment to best practice models based on evidence; and (iii) integration of oral health across programs and sectors of general health care and dental services.

Mr John Skinner
Director, Centre for Oral Health Strategy, NSW Ministry of Health

Professor Clive Wright
Associate Director, Centre for Education and Research on Ageing, Concord Clinical School, the University of Sydney

Dr Deborah Cockrell
President, Australian Dental Association, NSW Branch
Oral Health Care for Older People in NSW: a toolkit for oral health and health service providers (The Toolkit) has been prepared by Jennifer Noller for:

• Centre for Education and Research on Ageing, Concord Clinical School, the University of Sydney
• Centre for Oral Health Strategy, NSW Ministry of Health
• Australian Dental Association, NSW Branch.

Consultation:

• Marion Fisher, Outcomes Manager, Brain Injury Rehabilitation Directorate, Agency for Clinical Innovation and Brain Injury Rehabilitation Research Group
• Kristy Bartlett, Professional Services Dietitian, Dietitians Association of Australia
• Claire O’Connor, Rehabilitation Network Manager, Agency for Clinical Innovation
• Emma Campbell, Senior Speech Pathologist, Aged & Residential Care Services, Nepean Blue Mountains Local Health District
• Pip Taylor, A/Manager Speech Pathology, Westmead Hospital
• Prof Michael Woodward, Medical Director, Aged & Residential Care Services, Heidelberg Repatriation Hospital
• Drs Adel Matthias and Ranbeer Kaur, Special Needs Dentistry, Sydney Local Health District
• Dr Keith Heap, Dental Health Officer, Justice Health and Forensic Mental Health Network

Definitions:

Primary prevention: prevention of the onset of disease through risk education and health promotion.

Secondary prevention: Preventing the progression of disease.

Oral health and health service providers: In this document oral health and health service providers refers to oral health and health professionals who provide oral health care and ‘general’ health care to older people. This terminology is consistent with Alzheimer’s Australia, Dementia Language Guidelines.1

Special thanks to:

- Dr John Rogers, Principal Population Oral Health Advisor, Department of Health, Victoria
- Adrienne Lewis, Project Director Building Better Oral Health Communities, SA Dental Service
- Kristy Nixon, A/Manager, Health Promotion, SA Dental Service.

Acknowledgements and definitions

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The NSW population is ageing and there is a trend towards the reduction in edentulism (complete tooth loss and replacement with dentures). The consequences of increased tooth retention in older adults, combined with an increased proportion of people with complex medical needs in this age group, means new skills will be required by oral health and health service providers to manage these age-related disorders.

What is the purpose of The Toolkit?

The purpose of Oral Health Care for Older People in NSW: a toolkit for oral health and health service providers (The Toolkit) is to provide oral health information, aids and resources for oral health and health service providers in NSW to encourage a multi-disciplinary approach to the integration of oral health into health promotion initiatives for older people to help improve their oral health status and quality of life. The main focus of The Toolkit is on primary and secondary prevention as shown in Figure 1.

**Figure 1: Focus of Oral Health Care for Older People in NSW: a toolkit for oral health and health service providers**

<table>
<thead>
<tr>
<th>Focus of this document</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary prevention</td>
<td>Whole</td>
</tr>
<tr>
<td>Secondary prevention</td>
<td>Targeted</td>
</tr>
<tr>
<td>Early intervention</td>
<td>Individual</td>
</tr>
<tr>
<td>Chronic disease</td>
<td>Complex</td>
</tr>
</tbody>
</table>

Source: Adapted from Department of Health Victoria\(^2\)
The Toolkit is one component of an aged care package for older people in NSW available from the Centre for Oral Health Strategy, NSW Ministry of Health. Other components include oral health information that can be used by volunteer peer educators, and family carers and support workers.

What is in The Toolkit?

The Toolkit contains the following information:

• theoretical models that support the importance of oral health and its integration into ‘general’ health preventive and clinical intervention that requires a multidisciplinary approach to addressing health issues of the elderly;
• preventive oral health messages for older people;
• important oral problems and conditions (dental caries, periodontal diseases, xerostomia, falls (potential trauma to the mouth), oral cancer); and
• practical information that may help prevent or minimise oral health problems associated with older people with functional or cognitive limitations.

The Toolkit does not provide or replace specific oral health advice required for an individual. The personal oral health needs and maintenance regimes of older people vary considerably depending on the makeup of the teeth, gums and mouth of an individual. Specific advice regarding the oral health needs of an individual requires an assessment by an oral health professional, especially where the person is frail or cognitively impaired.

The Toolkit uses boxes with ‘notes’ or ‘cautions’ to highlight areas where specific issues should be addressed thoughtfully in relationship to the overall health and well-being needs of an individual.

Who should use The Toolkit?

The Toolkit can be used by a broad section of oral health and health service providers who work with older people in a variety of settings, including community programs or residential care. It can be used in different ways by oral health and health service providers and people with organisation-wide responsibilities.

Oral health service providers can use The Toolkit as a stand-alone resource that will give them a ‘how to’ guide to minimising oral health decline in older people. Health service providers can use the guide to integrate oral health care into strategies that minimise functional and health decline in older people.

How can I use The Toolkit?

This manual is a hardcopy guide of The Toolkit. There is also a PowerPoint presentation that accompanies the manual. The presentation can be used by oral health professionals to increase the oral health knowledge and skills of health service providers.


Implementing The Toolkit - turning knowledge into practice

The Toolkit can be implemented in conjunction with:

• Best Care for Older People Everywhere: The toolkit 2012;
• Better Oral Health in Residential Care resources;
• Care of Older People Toolkit;
• Oral Health Promotion Tutorials;
• Oral health resources for older people by Dr Peter King and The Australian Hygienists’ Association of Australia SA Branch Inc; and
• other aged care health strategies.

A comprehensive list of resources can be found in Appendix A.

Note: All dental practitioners are members of the dental team and where there is a structured professional or referral relationship between dental practitioners the dentist is the clinical team leader.

(Scope of Practice Registration Standard, June 2014)

Note: A further set of resources is in preparation as an outcome of the Building Better Oral Health Communities Project, which is designed to support the home care workforce. For further information contact the SA Dental Service.

Policy Context

Oral health 2020: A Strategic Framework for Action in NSW sets the platform for oral health action in NSW into the next decade. The goals for oral health in NSW are to:

• Improve access to oral health services in NSW
• Reduce disparities in the oral health status of people in NSW
• Improve the oral health of the NSW population through primary prevention.

The Toolkit is closely aligned with National and State strategic directions for oral health of older people.
SECTION 2: ORAL HEALTH AND OLDER PEOPLE

The life-stage of older adulthood has considerable variation depending on age and underlying genetic and medical conditions. Frailty, both physical and neurological, in older people represents the move from independence to dependence.

Ageing may mean an increase in the usage of prescription and non-prescription medicines that have side effects. This can impact on oral health as well as reduced capacity to perform oral hygiene on a daily basis. The risk of periodontal diseases also increases with age. Reduced income and affordability in retirement also increases the risk of oral disease.

2.1 DETERMINANTS OF ORAL HEALTH

The complexity of older adults’ oral health status is reflected in a range of determinants for oral conditions. Figure 2 demonstrates how these determinants relate to the oral health status of older adults.

**Figure 2: Determinants of oral health on older people**

<table>
<thead>
<tr>
<th>Economic, political and environmental conditions</th>
<th>Social, family and community context</th>
<th>Oral health related literacy and behaviour</th>
<th>Individual factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>Social &amp; family norms regarding oral health knowledge, attitudes, beliefs, values, skills &amp; behaviour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living conditions</td>
<td>Peer groups</td>
<td>Diet</td>
<td>Age</td>
</tr>
<tr>
<td>Health &amp; social policy</td>
<td>Cultural identity</td>
<td>Oral hygiene</td>
<td>Sex</td>
</tr>
<tr>
<td>Access to affordable food &amp; drinks</td>
<td>Social support</td>
<td>Smoking</td>
<td>Genetic &amp; biological endowment</td>
</tr>
<tr>
<td>Access to transport</td>
<td>Social capital</td>
<td>Alcohol</td>
<td>Medical conditions</td>
</tr>
<tr>
<td>Access to timely, affordable &amp; appropriate oral health care</td>
<td>Residential location &amp; type</td>
<td>Oral health literacy</td>
<td>Medications &amp; adverse effects</td>
</tr>
<tr>
<td>Exposure to fluoride</td>
<td>Use of oral health services</td>
<td>Self-esteem</td>
<td>Functional &amp; cognitive status</td>
</tr>
<tr>
<td></td>
<td>Self-efficacy</td>
<td>Behaviour problems</td>
<td>Nutrition, swallowing &amp; eating abilities</td>
</tr>
</tbody>
</table>

Source: Adapted from Watt and Fuller and Chalmers 2001
2.2 IMPACT OF ORAL DISEASE

Oral disease places a considerable burden on older people, their families and the community as shown in Figure 3. It affects individuals, their general health, functioning and quality of life, and the community through health system and economic costs.

Figure 3: Impact of oral disease in relation to older people

2.2.1 IMPACT ON GENERAL HEALTH

- Poor oral health is linked to increased risk of cardiovascular disease, stroke and aspiration pneumonia.7
- Chronic oral infection can complicate the medical management of health illnesses, such as diabetes, chronic heart failure, and respiratory diseases.7
- Dental problems in older people are a common cause of speech impairment, eating difficulties, pain when eating, and/or signs of mouth discomfort.7
- Tooth loss, poorly fitting dentures and oral infections can result in poor nutrition and persistent mouth pain – they can affect appetite, food enjoyment and ability to chew, which impacts on food intake and food selection.8
- Poor oral hygiene significantly increases the risk of patients with swallowing impairments (dysphagia) developing pneumonia.8

Note: If a person has any signs of oral disease or dysfunction that impact on their general health and well-being they should be referred to their oral health service provider.

2.2.2 IMPACT ON DAILY LIVING ACTIVITIES

At the individual level, poor oral health can go beyond infection and tooth loss and can include destruction and degeneration of the tissues of the mouth.9

- Poor oral health affects people’s everyday lives by causing pain and suffering, disrupting sleep patterns, and affecting the ability to eat and speak, sleep well, socialise and feel happy with their appearance. This in turn affects self-esteem, social interaction, the ability to work, and reduced quality of life.10
- Older people may also have a range of health problems or disabilities that impact on their ability to care for their own oral health, which may be related to issues associated with:
  - cognitive impairment (such as, dementia, Alzheimers)
  - functional limitations (such as, hand and upper limb function due to poor dexterity, pain and strength)
  - functional problems (such as, mouth and tongue movements and swallowing difficulties).7
- Dental difficulties and dry mouth (xerostomia) are two of the main causes of speech impairment in older adults.8
- Oral pain and difficulty with eating can affect nutritional intake and body weight and therefore skin integrity, strength and mobility, and continence.7
- Chronic infection and oral pain may affect mood and behaviour, especially for people with dementia who find it difficult to self-report their pain and discomfort.7

Note: If a person has a functional or cognitive dysfunction that impacts on their ability to perform oral health tasks they should be referred to the appropriate health service provider.

Source: Adapted from Rogers, 2011
2.2.3 ECONOMIC IMPACT

In 2010-12, total expenditure on dental services in Australia was $8.3 billion. Compared to the broader health system, the total level of expenditure on oral health (either government or individually funded) has remained relatively unchanged, averaging 6.09% of total health expenditure per year since 2004.13

2.3 ORAL HEALTH PROMOTION

The key to maintaining and improving the oral health status of older people is the use of oral health promotion strategies that focus on: (i) dental characteristics; (ii) life characteristics of older adults; and (iii) quality of life issues.12

Contemporary geriatric oral health promotion12 needs to incorporate the treatment of oral diseases and conditions with a strong focus on prevention strategies using multi-disciplinary involvement of medical, health and dental professionals in varied settings.13 The principles of the Ottawa Charter can be utilized to develop a geriatric oral health promotion matrix of strategies for older adults, as demonstrated in Table 1.14

Table 1: Geriatric oral health promotion matrix for older adults

<table>
<thead>
<tr>
<th>Principles of the Ottawa Charter</th>
<th>Functionality</th>
<th>Independent</th>
<th>Frail</th>
<th>Dependent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build healthy public policy</td>
<td>Advocacy</td>
<td>Advocacy</td>
<td>Advocacy Education of standards</td>
<td></td>
</tr>
<tr>
<td>Create supportive environments</td>
<td>Fluoridation specific oral health information Private insurance</td>
<td>Dental aids Specific oral health information Private insurance</td>
<td>Dental aids Oral health education Private insurance</td>
<td></td>
</tr>
<tr>
<td>Strengthen community action</td>
<td>Oral health education Oral health assessment in general health assessment</td>
<td>Assessment and screening protocols</td>
<td>Dental assessment Guidelines Directories</td>
<td></td>
</tr>
<tr>
<td>Develop personal skills</td>
<td>Personalised skill development</td>
<td>Service provider skill development</td>
<td>Specific interventions by dental professionals Service provider skill development</td>
<td></td>
</tr>
<tr>
<td>Reorient health services</td>
<td>Minimal dental intervention Prevention</td>
<td>Domiciliary dental and portable services</td>
<td>Public and private preventive and treatment regimes</td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from Wright and Harrison, 200214
A healthy mouth is essential for general health and wellbeing, enabling individuals to communicate effectively, and to eat and enjoy a variety of foods. It is important for overall quality of life, self-esteem and social confidence. Oral health care involves the consideration of the areas and conditions listed below:

1. lips
2. tongue
3. gums and mucosal tissues
4. saliva
5. natural teeth
6. dentures
7. oral cleanliness
8. dental pain.

3.1.5 MESSAGES FOR A HEALTHY MOUTH

There is a standard protective oral hygiene routine for older people based on the best ways (the best evidence base) to maintain a healthy mouth. There are 5 easy to remember messages that are a simple guide to having a healthy mouth and maintaining good health.

• Eat Well
• Drink Well
• Clean Well
• Play Well
• Stay Well.

3.1.5 TIPS TO EAT WELL

Tooth decay is related more to the frequency of sugar intake, than the total amount of sugar eaten.

• Reduce the frequency of eating sticky and sugary foods – limit biscuits, cakes, sweets and other sugary foods.
• Eat a variety of nutritious snacks daily, like fruit, nuts and yoghurt. Care should be taken by people with dentures if eating nuts.
• Eat from each food group (vegetables, fruits, dairy, meat, cereals/grains) to support oral and general health.
• Eat fresh, crunchy foods like apples, celery and carrots. Slicing these foods can make for easier eating.
• Eat meals or snacks containing milk or cheese to help reduce acid that causes tooth decay.

3.1.5 TIPS TO DRINK WELL

Fluoride in tap water helps to strengthen teeth and reduce acid that initiates tooth decay. Sugar is the source of bacterial energy in causing tooth decay.

• Drink tap water daily – in most places in NSW tap water contains fluoride.
• Drink water after meals and snacks, and after taking medications (especially if they have been crushed and mixed with a sweetener).
• Keep the mouth moist by frequently rinsing or sipping with water.
• Avoid sugar in tea and coffee and reduce the intake of caffeine drinks.
• Limit the intake of acidic and sugary drinks (like fruit juice, soft drink and cordial).

3.1.5 TIPS TO CLEAN WELL

Poor oral hygiene allows the bacteria in dental plaque to produce acids and other substances that damage teeth, gums and surrounding bone. The daily removal of dental plaque and maintenance of sound dental health practices are the key aspects to preventing oral diseases.

Tooth brushing with a fluoride toothpaste is the most effective and economical method of physically removing dental plaque from gums, teeth, teeth and/or dentures. Fluoride protects natural teeth by remineralising and strengthening tooth enamel.

Natural teeth

• Brush morning and night, using a soft toothbrush on gums, tongue and teeth.
• Use a pea-size amount of standard fluoride toothpaste.
• Spit out residue toothpaste but do not rinse the mouth after brushing. This allows the fluoride to pass effectively into the teeth.
• Replace a toothbrush: (i) when the bristles become shaggy; (ii) every three months; and (iii) following an acute infection, such as thrush. This helps to prevent harm to the mouth.
• Use dental floss and interdental brushes (with care) to remove debris from between teeth.

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Dentures

People who wear dentures are at risk of developing fungal infections. Fungal infections can be associated with: wearing dentures at night; poor cleanliness of dentures; denture plaque; deterioration to the denture resin; diet; and pre-existing general health factors, such as diabetes. Further, a scratched denture can be a source of irritation and increase the risk of oral infections.

• Clean dentures daily with a denture brush and liquid soap to remove plaque from all surfaces, then rinse well under running water.
• Do not use toothpaste as it is abrasive and can damage the denture surface.
• Hold the dentures carefully while brushing, and clean them in a bowl of water placed in a sink to protect from breakage if dropped.
• Brush gums and tongue with a standard toothbrush to remove plaque in the mouth.
• Remove dentures overnight and store in cold water. This allows gum tissue to rest.
3.1.4 5 TIPS TO PLAY WELL

As with maintaining general health, exercise is important. Exercises for stronger cheek and tongue muscles and a healthy saliva flow help to maintain a moist mouth, as shown in Figure 4.

- Put air in the cheek and slide the mouth from side to side to exercise facial muscles (A).
- Run the tongue around the inside of the cheek to exercise the tongue muscles (B).
- Massage the sides of the face using a circular motion to improve saliva flow (C).
- Exercise facial and lip muscles by “oo” and “ee” movements of the lips.
- Mouth rinses and tongue cleaning may help keep your breath fresh.

**CAUTION:** If a person has problems with lip or tongue function, they should be referred to an appropriate health service provider before carrying out an exercise program at home.

Figure 4: Mouth and cheek exercises
(A) Facial exercises
(B) Tongue exercises
(C) Salivary glands

Source: “Oral health exercise” for vibrant senior life.

3.1.5 5 TIPS TO STAY WELL

- Visit a dental professional regularly, even if you wear dentures. Everyone has different needs: talk with your oral health professional about how frequently you need to visit for a check-up.
- Protect the body from the sun with sunscreen, lip block, a hat, clothing, sunglasses.
- Use sugarless medicines, where possible.
- Use walking frames and do balancing exercises to reduce falls.
- Limit alcohol and don’t smoke or chew tobacco - contact the Quitline 131 848 or a General Practitioner, dental professional or pharmacist to help with quitting.

**Note:** Older people may be at risk of vitamin D deficiency, which can increase the risk of fractures. Refer to the Australian Cancer Council for guidance in finding the balance between sun protection and exposure for health.

**Source:** Chiyoko Hakuta & Kitahara Minoru. Department of Oral Health Promotion, Graduate School, Tokyo Medical and Dental University, Tokyo: Japan, 2008
Oral diseases and conditions are progressive and cumulative. If untreated they become more complex and costly over time. Some of the most important problems of the mouth are:

1. Dental caries (tooth decay)
2. Periodontal (gum) diseases
3. Xerostomia (dry mouth)
4. Trauma to the mouth (broken teeth)
5. Oral cancer.

Dental caries and periodontal diseases have historically been considered among the most important global oral health burdens;16 these are largely preventable and reversible if identified and managed early.17 Oral diseases can be significant reduced through: changes in diet; daily oral hygiene; quitting smoking; reducing alcohol consumption; limiting sugary and acidic beverages; access to fluoridated water and fluoride toothpaste; and changes in oral health behaviour.18

### 4.1 DENTAL CAVES (TOOTH DECAY) - 5 FACTS

Tooth decay is a diet and oral hygiene related disease that affects the teeth and causes pain.
- Tooth decay is the destruction of tooth structure and can affect both the enamel, which is the outer coating of the tooth, and the dentine or inner layer of the tooth.
- There are four main criteria required for tooth decay: a tooth (enamel or dentine), caries-causing bacteria, fermentable carbohydrates (such as sucrose), and time.19
- Tooth decay occurs when foods containing sugars and carbohydrates (such as, breads, cereals, soft drinks, fruits, cakes and sweets) pass over or are left on the teeth.
- Bacteria in the mouth digest these foods producing acids. The bacteria, acid, food debris and saliva combine to form plaque, which clings to the teeth and the acids quickly dissolve the minerals from the tooth enamel surface of the teeth.
- If this cycle continues without opportunity to replenish the minerals (which fluoride does) then a cavity may form in a tooth.

### 4.2 PERIODONTAL (GUM) DISEASES - 5 FACTS

- Gum diseases have been associated with general health problems such as, diabetes and increased risk of cardiovascular disease.
- The major local cause of gum disease is dental plaque, which is the sticky, colourless film containing bacteria, food debris and salivary products that build up on all surfaces of the teeth, dentures, gums and tongue.
- Bacteria found in dental plaque cause irritation of the gums that support the teeth. This can lead to inflammation and infection that can destroy gum and underlying bone.
- When dental plaque is not removed it may harden into calculus (tartar), which can only be removed by a dental professional.
- Periodontal diseases are highly associated with smoking and excess alcohol use.

### 4.3 XEROSTOMIA (DRY MOUTH) - 5 FACTS

- Ageing may be associated with reduced saliva and salivary gland hypo-function, and reduced salivary flow.20
- Use of medications is associated with an increased incidence of dry mouth.
- Saliva has antibacterial properties. When the quantity and quality of saliva is reduced oral diseases can develop very quickly. Sugar-free chewing gum may assist in promoting saliva.
- Dry mouth is uncomfortable, unpleasant and can impair taste, chewing, swallowing and speech. It is associated with rapid dental decay in those with salivary gland hypo-function.
- Dry mouth is linked with increased risk of aspiration pneumonia. Regular mouth care from a dental professional has been shown to reduce pneumonia in older patients.21, 22, 23

**Note:** Products are available that can offset some of the effects of dry mouth.

### 4.4 FALLS (POTENTIAL TRAUMA TO THE MOUTH) - 5 FACTS

Falls are the leading cause of injury-related hospitalisations in NSW, accounting for around 30% of all such hospitalisations. In 2012-13, there were 56,609 fall-related hospitalisations of NSW residents. Older people have the highest rates of fall-related hospitalisations: almost 66% (37,126 hospitalisations) as demonstrated in Figure 5.

Fall-related hospitalisation rates increased from 1992-93 to 2012-13 by almost 53% in people aged 65 or older.24
- Older people are more likely to suffer from chronic illnesses and experience acute health problems, such as cardiovascular disease, falls and fractures.25

**Figure 5:** Falls related injury: overnight stay hospitalisations

<table>
<thead>
<tr>
<th>Rate per 100,000 population</th>
</tr>
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<tbody>
<tr>
<td>3500</td>
</tr>
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<td>3000</td>
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<td>2500</td>
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<td>1500</td>
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<td>1000</td>
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<tr>
<td>500</td>
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</tbody>
</table>

**Source:** NSW Health25

- Older adults may be more at risk of falls because of visual and hearing impairments.
- Poor nutritional status and illness can be a cause of muscle loss, which may result in decreased mobility, instability and falls.27
- Older people who are frail and confused are at greater risk of falls, and functional decline and cognitive decline.28
- Medications may be implicated in older patients presenting with falls, confusion and incontinence.29

Fall-related injury: overnight stay hospitalisations

<table>
<thead>
<tr>
<th>Year</th>
<th>Males, 65+</th>
<th>Males, All ages</th>
<th>Females, 65+</th>
<th>Females, All ages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-93</td>
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<td>1994-95</td>
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<td>2010-11</td>
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</table>
4.5 ORAL CANCER
Mouth cancer usually starts in the cells lining the mouth. The most common sites are the lips, tongue and/or floor of the mouth. Smoking and drinking alcohol are known risk factors. Mouth cancer can be cured if treated in its earlier stages.
The symptoms of mouth cancer can include:
- A visible mass or lump that may or may not be painful.
- An ulcer that won’t heal.
- A persistent blood blister.
- Bleeding from the mass or ulcer.
- Loss of sensation anywhere in the mouth.
- Trouble swallowing.
- Impaired tongue mobility.
- Difficulty moving the jaw.
- Speech changes, such as slurring or lack of clarity.
- Loose teeth and/or sore gums.
- Altered taste.
- Swollen lymph glands.

Source: http://franklindental.net/blog/oral-cancer-screening-8-steps-to-early-detection.html
As Australia’s population ages the incidence of dementia will increase. In 2011, among Australians aged 65 years and over, almost 1 in 10 (9%) had dementia, and among those aged 85 years and over, 3 in 10 (30%) had dementia. This may affect the person’s ability to carry out adequate daily oral hygiene.

This section provides practical information that may help prevent or minimise oral health problems associated with older people with functional or cognitive limitations. This does not replace the need for specific individual oral health care maintenance plans for individual needs.

**5.1 REQUIREMENT FOR PROVISION OF DENTAL CARE**

The following items are required to provide dental care to frail or dependent people in hospital or residential care settings:

- Sink / water
- Gloves, mask, eye/facial protection
- Gown
- Spray bottles
- Containers for dentures
- Labels for spray bottles and denture containers
- Denture brush
- Mild soap (for dentures)
- Disinfectant (for dentures)
- Soft toothbrush
- Standard (1000ppm – 1500ppm) toothpaste (for natural teeth).

**Note:** All dental practitioners are members of the dental team and where there is a structured professional or referral relationship between dental practitioners the dentist is the clinical team leader.

_(Scope of Practice Registration Standard, June 2014)_

**5.2 ADDITIONAL ORAL CARE**

Additional oral care management for older people who are frail or dependent may be required by an oral health professional, such as antifungal, antibiotic and pain medication, and a high fluoride (5000 ppm) toothpaste to therapeutically protect against tooth decay.

These older adults often require a multi-disciplinary approach that includes simple strategies to assess their oral health and provide oral health care. For example, consultations with geriatricians and other health professionals may lead to individualised special aids and techniques that can be used by service providers, such as:

- One-handed tooth-brushing techniques
- modified and suction toothbrushes
- floss / interdental brushes.

**5.3 OTHER TOOTHBRUSHING AIDS**

- Soft toothbrush suitable for bending
- Electric toothbrush
- Toothbrush with an enlarged handle
- Mouth props.

**5.4 TECHNIQUES**

- Attach a Velcro strap, elastic band or bike grip to a toothbrush.
- Use toothpaste with a small nozzle or a pump action dispenser.
- Apply toothpaste onto teeth using the wipe technique.

**5.5 SALIVARY AIDS**

Some salivary aids may help people with dry mouth.

- spray bottles for mouth rinses
- saliva substitutes
- use of chlorhexidine / bicarbonate swabs.

**CAUTION:** Some oral care products may exacerbate dry mouth and damage oral tissue. Unless otherwise directed do not use mouthwashes or swabs containing alcohol. Ensure infection control issues between clients are managed appropriately.

**5.6 CHANGED BEHAVIORS**

Older people, especially those suffering dementia, confusion or Alzheimers, can behave in ways that are resistive to oral health care.

A changed behaviour is any behaviour that causes stress or distress to the person with the behaviour or any others interacting with them. It refers to people whose behaviours are associated with a decline in their cognitive capacity, generally due to dementia including associations with other medical conditions.

This behaviour may be displayed in the following ways:

- fear of being touched
- not opening the mouth
- not understanding or responding to directions
- biting the toothbrush
- grabbing or hitting out.

**5.6.1 NSW Health guidelines**

Guidelines for Working with People with Challenging Behaviours in Residential Aged Care Facilities recommends using appropriate interventions and minimising restraint. It aims to improve long term care options for older people with severe behavioural and psychological symptoms associated with dementia and/or mental illness and support residential aged care service providers in providing quality care for their residents.

**5.6.2 PHYSICAL RESTRAINT AS A MANAGEMENT STRATEGY**

Physical restraint that is neither an adjunct to medical or dental treatment nor acceptable within urgent situations (such as, surgical procedures, patients harming themselves or others) requires the approval of a guardian empowered by the Guardianship Tribunal to give such approval.

**ESSENTIAL**

Toothbrushing or any oral health care intervention requires consent from the individual. If a person is cognitively impaired consent is required by their guardian.
6.1 MOUTH CHECKS

The Oral Health Assessment Tool (Appendix B) can be used to assess any issues of concern, such as:

- **Lips:**
  - Dryness, lumps, cracked corners, inflammation or abnormal colour.

- **Tongue:**
  - Patchy, white coating or any redness or swelling.

- **Gums & oral tissue:**
  - Ulcers, sores, swelling, redness or bleeding gums.

- **Teeth:**
  - Worn down teeth, decay (black or brown spots), broken fillings, loose or broken teeth or exposed tooth roots, tooth sensitivity.

- **Dentures:**
  - Cracks, breaks, worn areas, cleanliness, signs of irritation, chipped or broken teeth on denture, bent or broken mental wires or clips on partial denture.

- **Mouth and saliva:**
  - Bad breath, dry oral tissues, oral pain, difficulty eating, swallowing or speaking, poor oral cleanliness and food left in mouth.
  - Saliva that is thick, stringy, rope like, sticky frothy, sticky bubbly or water clear saliva.

**Note:**
- The Oral Health Assessment Tool is used by service providers for residents in aged care facilities.
- If a person has a functional or cognitive limitation that impacts on their ability to perform oral health tasks they should be referred to the appropriate health service provider.
6.2 ORAL HEALTH SCREENING QUESTIONS

There is also a set of 6 oral health screening questions that can be useful for health service providers to trigger a dental referral. They can easily be incorporated into general health assessment processes. They are also beneficial for older people who can self-report.

A ‘yes’ to any of the 6 questions about natural teeth, mouth or dentures triggers a dental referral:

1. Do you have any of your natural teeth?
2. Have you had pain in your mouth while chewing?
3. Have you lost any fillings, or do you need a dental visit for any other reason?
4. Have you avoided laughing or smiling?
5. Have you had to interrupt meals?
6. Have you had difficulty relaxing?

Source: Slade 2007

Note: Some jurisdictions in Australia are using the 6 trigger referral questions from SA Dental Service within their ACAT processes. These questions have been recommended to be integrated into the National Comprehensive Assessment (ACAT assessment) and should be operational by 1 July 2015 for ACAT assessors and some home care regional assessment services.
## Appendix A: Additional Information and Resources

<table>
<thead>
<tr>
<th>Name of resource</th>
<th>Type of resource</th>
<th>Development</th>
<th>Date developed</th>
<th>Web address</th>
<th>Section</th>
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<tr>
<td>Professional portfolio</td>
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<td><a href="http://www.sadental.sa.gov.au/Portals/57ad7180-c5e7-49f5-b282-c6475c8db7ee7/BOHRC-Professiona-Portfolio-10-2-11.pdf">http://www.sadental.sa.gov.au/Portals/57ad7180-c5e7-49f5-b282-c6475c8db7ee7/BOHRC-Professiona-Portfolio-10-2-11.pdf</a></td>
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<tr>
<td>Oral health promotion tutorials</td>
<td>PowerPoint®</td>
<td>Oral Health CRC Ltd, University of Melbourne, Bupa Health Foundation Ltd</td>
<td>2014</td>
<td><a href="http://www.e-dentalez.com/sitio/oral-health-promotion/">http://www.e-dentalez.com/sitio/oral-health-promotion/</a></td>
<td>1, 2, 3, 4</td>
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<tr>
<td>Health literacy</td>
<td>Web information</td>
<td>National Network of Libraries of Medicine (USA)</td>
<td>2013</td>
<td><a href="http://nnlm.gov/outreach/consumer/healthlit.html">http://nnlm.gov/outreach/consumer/healthlit.html</a></td>
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<tr>
<td>Name of resource</td>
<td>Type of resource</td>
<td>Development</td>
<td>Date developed</td>
<td>Web address</td>
<td>Section</td>
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<td>------------------------------------------------------------------------------</td>
<td>---------</td>
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<td>Tooth brushing technique</td>
<td>video</td>
<td>UK</td>
<td>2012</td>
<td><a href="http://www.youtube.com/watch?v=IEGSK6r9PrQ">http://www.youtube.com/watch?v=IEGSK6r9PrQ</a></td>
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<tr>
<td>Gum recession and how to treat it</td>
<td>video</td>
<td>USA</td>
<td>2012</td>
<td><a href="http://www.youtube.com/watch?v=x29jZh_hxzM">http://www.youtube.com/watch?v=x29jZh_hxzM</a></td>
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</tr>
<tr>
<td>Residential aged care facility oral health student placement program: the student experience</td>
<td>DVD</td>
<td>Centre for Oral health Strategy, NSW Health</td>
<td>2013</td>
<td>Contact: <a href="mailto:janet.wallace@newcastle.edu.au">janet.wallace@newcastle.edu.au</a></td>
<td>5</td>
</tr>
<tr>
<td>Brushing up on mouth care</td>
<td>Education and resource package</td>
<td>Canada</td>
<td>2013</td>
<td><a href="http://www.ahpcr.dal.ca/projects/oral-care/">http://www.ahpcr.dal.ca/projects/oral-care/</a></td>
<td>5</td>
</tr>
<tr>
<td>Best practices toolkit: implementing and sustaining change in long-term care</td>
<td>Web information</td>
<td>Canada</td>
<td></td>
<td><a href="http://ltctoolkit.naco.ca/resources/oralcare">http://ltctoolkit.naco.ca/resources/oralcare</a></td>
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</tr>
<tr>
<td>Oral hygiene instruction for caregivers</td>
<td>Video</td>
<td>Canada</td>
<td>2013</td>
<td><a href="http://www.youtube.com/watch?v=vc4hG_8t9nA">http://www.youtube.com/watch?v=vc4hG_8t9nA</a></td>
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<tr>
<td>Dental hygiene for residents in long term care - part 1 - introduction</td>
<td>PowerPoint® presentation with voice-over</td>
<td>USA</td>
<td>2013</td>
<td><a href="http://www.youtube.com/watch?v=-DIREyOIPkE">http://www.youtube.com/watch?v=-DIREyOIPkE</a></td>
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<td>Dental hygiene for residents in long term care - part 2 - challenges</td>
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<td>2013</td>
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<tr>
<td>Dental hygiene for residents in long term care - part 3 - dry mouth</td>
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<td></td>
<td></td>
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### APPENDIX B: ORAL HEALTH ASSESSMENT TOOL

**SECTION 7 : APPENDICES**

<table>
<thead>
<tr>
<th>Resident</th>
<th>Completed By</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>O Is independent</td>
<td>O Needs reminding</td>
<td>O Needs supervision</td>
</tr>
<tr>
<td>O Will not open mouth</td>
<td>O Grinding or chewing</td>
<td>O Head faces down</td>
</tr>
<tr>
<td>O Is aggressive</td>
<td>O Bites</td>
<td>O Excessive head movement</td>
</tr>
<tr>
<td>O Cannot rinse and spit</td>
<td>O Will not take dentures out at night</td>
<td>O Cannot swallow well</td>
</tr>
</tbody>
</table>

#### LIPS

<table>
<thead>
<tr>
<th>Healthy</th>
<th>Changes</th>
<th>Unhealthy</th>
<th>Dental Referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smooth, pink, moist</td>
<td>O Yes</td>
<td>O No</td>
<td></td>
</tr>
<tr>
<td>Dry, chapped or red at corners</td>
<td>O No</td>
<td>O Yes</td>
<td></td>
</tr>
<tr>
<td>Swelling or lump, red / white / ulcerated bleeding / ulcerated at corners</td>
<td>O No</td>
<td>O Yes</td>
<td></td>
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</table>

#### NATURAL TEETH

<table>
<thead>
<tr>
<th>Healthy</th>
<th>Changes</th>
<th>Unhealthy</th>
<th>Dental Referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>No decayed or broken teeth or roots</td>
<td>O Yes</td>
<td>O No</td>
<td></td>
</tr>
<tr>
<td>1-3 decayed or broken teeth or roots, or teeth very worn down</td>
<td>O No</td>
<td>O Yes</td>
<td></td>
</tr>
<tr>
<td>4 or more decayed or broken teeth or roots, or fewer than 4 teeth, or very worn down teeth</td>
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#### TONGUE

<table>
<thead>
<tr>
<th>Healthy</th>
<th>Changes</th>
<th>Unhealthy</th>
<th>Dental Referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal, moist, roughness, pink</td>
<td>O Yes</td>
<td>O No</td>
<td></td>
</tr>
<tr>
<td>Patchy, fissured, red, coated</td>
<td>O No</td>
<td>O Yes</td>
<td></td>
</tr>
<tr>
<td>Patch that is red and/or white / ulcerated, swollen</td>
<td>O No</td>
<td>O Yes</td>
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</table>

#### DENTURES

<table>
<thead>
<tr>
<th>Healthy</th>
<th>Changes</th>
<th>Unhealthy</th>
<th>Dental Referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>No broken areas or teeth, worn regularly, and named</td>
<td>O Yes</td>
<td>O No</td>
<td></td>
</tr>
<tr>
<td>1 broken area or tooth, or worn 1 to 2 hours per day only or not named</td>
<td>O No</td>
<td>O Yes</td>
<td></td>
</tr>
<tr>
<td>1 or more broken areas or teeth, denture missing / not worn, need adhesive, or not named</td>
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<td>O Yes</td>
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</tbody>
</table>

#### GUMS AND ORAL TISSUE

<table>
<thead>
<tr>
<th>Healthy</th>
<th>Changes</th>
<th>Unhealthy</th>
<th>Dental Referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moist, pink, smooth, no bleeding</td>
<td>O Yes</td>
<td>O No</td>
<td></td>
</tr>
<tr>
<td>Dry, shiny, rough, red, swollen, sore, one ulcer / sore spot, sore under dentures</td>
<td>O No</td>
<td>O Yes</td>
<td></td>
</tr>
<tr>
<td>Swollen, bleeding, ulcers, white / red patches, generalised redness under dentures</td>
<td>O No</td>
<td>O Yes</td>
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</tbody>
</table>

#### ORAL CLEANLINESS

<table>
<thead>
<tr>
<th>Healthy</th>
<th>Changes</th>
<th>Unhealthy</th>
<th>Dental Referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean and no food particles or tartar in mouth or on dentures</td>
<td>O Yes</td>
<td>O No</td>
<td></td>
</tr>
<tr>
<td>Food, tartar, plaque 1-2 areas of mouth, or on small area of dentures</td>
<td>O No</td>
<td>O Yes</td>
<td></td>
</tr>
<tr>
<td>Food particles, tartar, plaque most areas of mouth, or on most of dentures</td>
<td>O No</td>
<td>O Yes</td>
<td></td>
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</tbody>
</table>

#### SALIVA

<table>
<thead>
<tr>
<th>Healthy</th>
<th>Changes</th>
<th>Unhealthy</th>
<th>Dental Referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moist tissues watery and free flowing</td>
<td>O Yes</td>
<td>O No</td>
<td></td>
</tr>
<tr>
<td>Dry, sticky tissues, little saliva present, resident thinks they have a dry mouth</td>
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<td>O Yes</td>
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</tr>
<tr>
<td>Tissues parched and red, very little / no saliva present, saliva is thick, resident thinks they have a dry mouth</td>
<td>O No</td>
<td>O Yes</td>
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</table>

#### DENTAL PAIN

<table>
<thead>
<tr>
<th>Healthy</th>
<th>Changes</th>
<th>Unhealthy</th>
<th>Dental Referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>No behavioural, verbal or physical signs of pain</td>
<td>O Yes</td>
<td>O No</td>
<td></td>
</tr>
<tr>
<td>Verbal &amp;/or behavioural signs of pain such as pulling at face, chewing, lips, not eating, changed behaviour.</td>
<td>O No</td>
<td>O Yes</td>
<td></td>
</tr>
<tr>
<td>Physical pain signs (swelling of cheek or gum, broken teeth, ulcers), as well as verbal &amp;/or behavioural signs (pulling at face, not eating, changed behaviour)</td>
<td>O No</td>
<td>O Yes</td>
<td></td>
</tr>
</tbody>
</table>

* Unhealthy signs usually indicate referral to a dental professional is necessary

**ASSESSOR COMMENTS:**

Source: Adapted from Better Oral Health in Residential Care: professional portfolio


