



**Tavola Rotonda**  
**La definizione di raccomandazioni per la cura**  
**del cavo orale nell'anziano: i contributi**  
**multispecialistici e multiprofessionali**

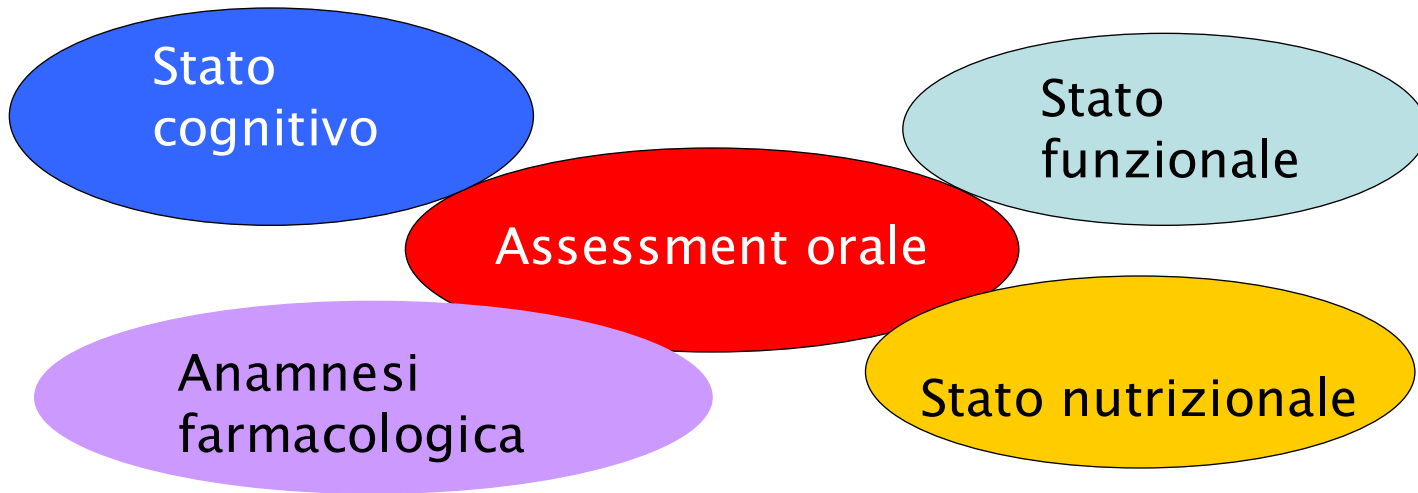
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# Patologia cavo orale

- Alta incidenza e prevalenza
- Fortemente correlata con patologie sistemiche (malattie cardiovascolari, diabete, polmonite da inalazione)
- Marcato impatto sulla qualità di vita

Valutazione multidimensionale è la metodologia fondamentale della Geriatria che può essere applicata a qualsiasi campo della cura dell'anziano in quanto permette l'integrazione delle competenze finalizzata ad un piano individualizzato di intervento



# Strumenti di valutazione

Oral Health Assessment Tool	Population	Reference
Oral Assessment Guide (OAG)	<ul style="list-style-type: none"> <li>For use in acute care settings, ICU, cancer centres, rehabilitation settings</li> </ul>	Eilers, J., Berger, A. & Petersen, M. (1988). Development, testing, and application of the oral assessment guide. <i>Oncology Nursing Forum</i> , 15(3):325-30.
Revised Oral Assessment Guide (ROAG)	<ul style="list-style-type: none"> <li>Validated in three small studies of geriatric rehab clients</li> </ul>	Andersson, P., Persson, L., Hallberg, I.R. & Renvert, S. (2004). Oral health problems in elderly rehabilitation patients. <i>International Journal of Dental Hygiene</i> , 2(2), 70-77.
Brief Oral Health Status Examination (BOHSE)	<ul style="list-style-type: none"> <li>Validated in long-term care and residential care settings</li> <li>Can be used with cognitively impaired clients</li> </ul>	Kayser-Jones, J., Bird, W., Paul, S., Long, L. & Schell, E. (1995). An instrument to assess the oral health status of nursing home residents. <i>Gerontologist</i> , 35(6):814-24.

# Strumenti di valutazione

Oral Health Assessment tool	Population	Reference
National Cancer Institute (NCI) Scale	<ul style="list-style-type: none"><li>❖ NCI is most commonly used in clinical trials</li><li>❖ Scale to assess oral mucositis</li><li>❖ Widely validated and extensively used.</li></ul>	<i>World Health Organization (1997). Handbook for reporting results of cancer treatment. Author. pp.15-22.</i>
World Health Organization (WHO) Grading Scale	<ul style="list-style-type: none"><li>❖ Measures anatomical, symptomatic and functional components of oral mucositis.</li><li>❖ Combines both objective mucosal changes (redness and ulceration) with functional outcomes (ability to eat) to arrive at a score.</li><li>❖ The WHO Grading Scale is very frequently used in oncology clinical practice</li></ul>	<i>World Health Organization (1997). Handbook for reporting results of cancer treatment. Author. pp.15-22.</i>

# Strumenti di valutazione

Oral Health Assessment Tool	Population	Reference
<p>Oral Health Assessment Tool (OHAT)</p> <p>* Also known as the Modified Brief Oral Health Status Examination</p>	<ul style="list-style-type: none"> <li>For use in long-term care or residential care settings, and can be used with cognitively impaired clients</li> </ul>	<p>See Sample 1 (Page 69)</p> <p>Chalmers, J., King, P., Spencer, A., Wright, F. &amp; Carter, K. (2005). The oral health assessment tool – validity and reliability. <i>Australian Dental Journal</i>, 50(3), 191-199.</p> <p>Chalmers, J., Johnson, V., Tang, J. &amp; Titter, M. (2004). Evidence-based protocol: Oral hygiene care for functionally dependent and cognitively impaired older adults. <i>Journal of Gerontological Nursing</i>, 30(1), 5-12.</p>
The Holistic and Reliable Oral Assessment Tool (THROAT)	<ul style="list-style-type: none"> <li>Developed and tested for use in elderly hospitalized patients in a single trial.</li> </ul>	<p>See Sample 2 (Page 70)</p> <p>Dickinson, H., Watkins, C. &amp; Leathley, M. (2001). The development of the THROAT: The holistic and reliable oral assessment tool. <i>Clinical Effectiveness in Nursing</i>, 5, 106-110.</p>
Mucosal Plaque Index (MPI)	<ul style="list-style-type: none"> <li>Measures only mucosal and plaque indices</li> <li>Designed to assess oral care in groups of elderly patients/clients.</li> </ul>	<p>Henriksen, B., Ambjornsen, E. &amp; Axell, T. (1999). Evaluation of a mucosal-plaque index (MPI) designed to assess oral care in groups of elderly. <i>Special Care Dentistry</i>, 19(4), 154-157.</p>

## The Oral Health Assessment Tool – Validity and reliability

JM Chalmers,\* PL King,† AJ Spencer,‡ FAC Wright,§ KD Carter\*

### Abstract

**Background:** The Oral Health Assessment Tool (OHAT) was a component of the *Best Practice Oral Health Model for Australian Residential Care* study. The OHAT provided institutional carers with a simple, eight category screening tool to assess residents' oral health, including those with dementia. This analysis presents OHAT reliability and validity results.

**Methods:** A convenience sample of 21 residential care facilities (RCFs) in urban and rural Victoria, NSW and South Australia used the OHAT at baseline, three-months and six-months to assess intra- and inter-carer reliability and concurrent validity.

**Results:** Four hundred and fifty five residents completed all study phases. Intra-carer reliability for OHAT categories: percent agreement ranged from 74.4 per cent for oral cleanliness, to 93.9 per cent for dental pain; Kappa statistics were in moderate range (0.51-0.60) for lips, saliva, oral cleanliness, and for all other categories in range of 0.61-0.80 (substantial agreement) ( $p < 0.05$ ). Inter-carer reliability for OHAT categories: percent agreement ranged from 72.6 per cent for oral cleanliness to 92.6 per cent for dental pain; Kappa statistics were in moderate range (0.48-0.60) for lips, tongue, gums, saliva, oral cleanliness, and for all other categories in range of 0.61-0.80 (substantial agreement) ( $p < 0.05$ ). Intraclass correlation coefficients for OHAT total scores were 0.78 for intra-carer and 0.74 for inter-carer reliability. Validity analyses of the OHAT categories and examination findings showed complete agreement for the lips category, with the natural teeth, dentures, and tongue categories having high significant correlations and percent agreements. The gums category had significant moderate correlation and percent agreement. Non-significant and low correlations and percent agreements were evident for the saliva, oral cleanliness and dental pain categories.

**Conclusion:** The Oral Health Assessment Tool was evaluated as being a reliable and valid screening assessment tool for use in residential care facilities, including those with cognitively impaired residents.

**Key words:** Nursing facilities, geriatric dentistry, assessment tool, older adults.

**Abbreviations and acronyms:** BOHSE = Brief Oral Health Status Examination; OHAT = Oral Health Assessment Tool; OHCP = Oral Hygiene Care Plan; RCF = residential care facility.

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## **Caring for oral health in Australian residential care**

### **4 Conclusion**

In this study, the use of oral and dental policies and procedures, an Oral Health Assessment Tool (OHAT) and an Oral Hygiene Care Plan improved carers' involvement in maintenance of residents' oral health and the delivery of oral hygiene care in Australian residential care facilities. The OHAT was evaluated as being a reliable and valid screening tool for use in Australian residential care facilities, including with cognitively impaired residents.



*Oral Health:  
Nursing Assessment and Interventions*



**RNAO: Registered Nurses'  
Association of Ontario  
(CANADA)**

# INTRODUCING THE ORAL HEALTH ASSESSMENT TOOL (OHAT)



**ORAL HEALTH ASSESSMENT TOOL (OHAT) for LONG-TERM CARE**

Resident: \_\_\_\_\_

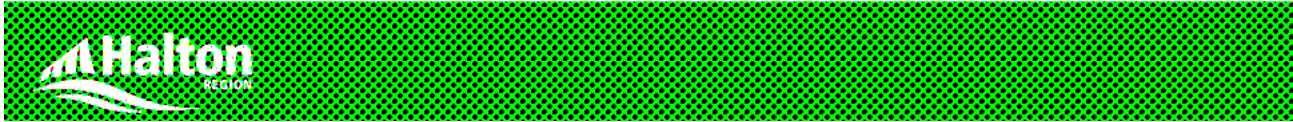
Nursing Admission  Quarterly  1  2  3

Date: \_\_\_\_\_

NOTE: A Star \* and underline indicates referral to an oral health professional (i.e. dentist, dental hygienist, denturist) is required.

Category	0 = healthy	1 = changes	2 = unhealthy	Score	Action Required	Action Completed
Lips	Smooth, pink, moist	Dry, chapped, or red at corners	<u>Swelling or lump, white/red/ulcerated patch, bleeding/ ulcerated at corners</u>		1=intervention 2=refer	<input type="checkbox"/> YES <input type="checkbox"/> NO
Tongue	Normal, moist, pink	Patchy, fissured, red, coated	<u>Patch that is red and/or white, ulcerated, swollen</u>		1=intervention 2=refer	<input type="checkbox"/> YES <input type="checkbox"/> NO
Gums and Tissues	Pink, moist, Smooth, no bleeding	<u>Dry, shiny, rough, red, swollen around 1 to 6 teeth, one ulcer or sore spot under denture</u>	<u>Swollen, bleeding around 7 teeth or more, loose teeth, ulcers and/or white patches, generalized redness and/or tenderness</u>		1 or 2 = refer	<input type="checkbox"/> YES <input type="checkbox"/> NO
Saliva	Moist tissues, watery and free flowing saliva	Dry, sticky tissues, little saliva present, resident thinks they have dry mouth	<u>Tissues parched and red, very little or no saliva present, saliva is thick, ropey, resident complains of dry mouth</u>		1=intervention 2=refer	<input type="checkbox"/> YES <input type="checkbox"/> NO
Natural Teeth <input type="checkbox"/> Y <input type="checkbox"/> N	No decayed or broken teeth/ roots	<u>1 to 3 decayed or broken teeth/roots</u>	<u>4 or more decayed or broken teeth/ roots, or very worn down teeth, or less than 4 teeth with no denture</u>		1 or 2 = refer	<input type="checkbox"/> YES <input type="checkbox"/> NO
Denture(s) <input type="checkbox"/> Y <input type="checkbox"/> N	No broken areas/teeth, dentures worn regularly and name is on	1 broken area/tooth, or dentures only worn for 1 to 2 hours daily, or no name on denture(s)	<u>More than 1 broken area/tooth, denture missing or not worn due to poor fit, or worn only with denture adhesive</u>		1 = ID denture 2 = refer	<input type="checkbox"/> YES <input type="checkbox"/> NO
Oral Cleanliness	Clean and no food particles or tartar on teeth or dentures	Food particles/ tartar/ debris in 1 or 2 areas of the mouth or on small area of dentures; occasional bad breath	<u>Food particles, tartar, debris in most areas of the mouth or on most areas of denture(s), or severe halitosis (bad breath)</u>		1=intervention 2=refer	<input type="checkbox"/> YES <input type="checkbox"/> NO
Dental Pain	No behavioural, verbal or physical signs of pain	<u>Verbal and/or behavioural signs of pain such as wincing of face, chewing lips, not eating, aggression</u>	<u>Physical signs such as swelling of cheek or gum, broken teeth, ulcers, "gum boil", as well as verbal and/or behavioural signs</u>		1 or 2 = refer	<input type="checkbox"/> YES <input type="checkbox"/> NO
				Completed by: _____		

**FOLLOW UP**  
 Oral Hygiene Care Plan - Date: \_\_\_\_\_  Oral Health Assessment to be repeated on - Date: \_\_\_\_\_  
 Person and/or family/guardian refuses: a)  Referral - Date: \_\_\_\_\_ b)  Dental Treatment - Date: \_\_\_\_\_

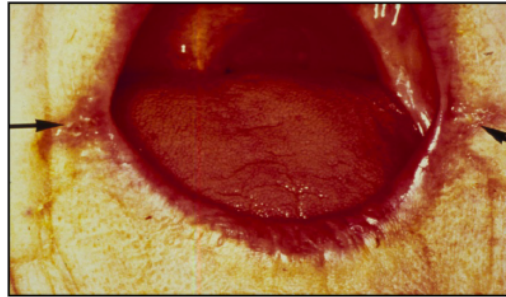


# Lips

0 = healthy



1 = changes



2 = unhealthy



## Nursing intervention

- Use lanolin, KY Jelly or other lip lubricant
- Do NOT use petroleum based products
- Consider possibility of vitamin B deficiency
- Monitor - if no change after 7 days refer

## The Kayser-Jones Brief Oral Health Status Examination (BOHSE)

Resident's Name \_\_\_\_\_

Date \_\_\_\_\_

Examiner's name \_\_\_\_\_

TOTAL SCORE \_\_\_\_\_

CATEGORY	MEASUREMENT	0	1	2
LYMPH NODES	Observe and feel nodes	No enlargement	Enlarged, not tender	Enlarged and tender*
LIPS	Observe, feel tissue and ask resident, family or staff (e.g. primary caregiver)	Smooth, pink, moist	Dry, chapped, or red at corners*	White or red patch, bleeding or ulcer for 2 weeks*
TONGUE	Observe, feel tissue and ask resident, family or staff (e.g. primary caregiver)	Normal roughness, pink and moist	Coated, smooth, patchy, severely fissured or some redness	Red, smooth, white or red patch; ulcer for 2 weeks*
TISSUE INSIDE CHEEK, FLOOR AND ROOF OF MOUTH	Observe, feel tissue and ask resident, family or staff (e.g. primary caregiver)	Pink and Moist	Dry, shiny, rough red, or swollen*	White or red patch, bleeding, hardness; ulcer for 2 weeks*
GUMS BETWEEN TEETH AND/OR UNDER ARTIFICIAL TEETH	Gently press gums with tip of tongue blade	Pink, small indentations; firm, smooth and pink under artificial teeth	Redness at border around 1-3 teeth, one red area or sore spot under artificial tooth*	Swollen or bleeding gums, redness at border around 7 or more teeth, loose teeth; generalized redness or sores under artificial teeth*
SALIVA (EFFECT ON TISSUE)	Touch tongue blade to center of tongue and floor of mouth	Tissues moist, saliva free flowing and watery	Tissues dry and sticky	Tissues parched and red, no saliva*
CONDITION OF NATURAL TEETH	Observe and count number of decayed or broken teeth	No decayed or broken teeth/roots	1-3 decayed or broken teeth/roots*	4 or more decayed or broken teeth/roots; fewer than 4 teeth in either jaw*
CONDITION OF ARTIFICIAL TEETH	Observe and ask patient, family or staff (e.g. primary caregiver)	Unbroken teeth, worn most of the time	1 broken/missing tooth, or worn for eating or cosmetics only	More than 1 broken or missing tooth, or either denture missing or never worn*
PAIRS OF TEETH IN CHEWING POSITION (NATURAL OR ARTIFICIAL)	Observe and count pairs of teeth in chewing position	12 or more pairs of teeth in chewing position	8-11 pairs of teeth in chewing position	0-7 pairs of teeth in chewing position*
ORAL CLEANLINESS	Observe appearance of teeth or dentures	Clean, no food particles/tartr in the mouth or on artificial teeth	Food particles/tartr in one or two places in the mouth or on artificial teeth	Food particles/tartr in most places in the mouth or on artificial teeth

Upper dentures labeled: Yes \_\_\_\_\_ No \_\_\_\_\_ None \_\_\_\_\_ Lower dentures labeled: Yes \_\_\_\_\_ No \_\_\_\_\_ None \_\_\_\_\_

Is your mouth comfortable? Yes \_\_\_\_\_ No \_\_\_\_\_ If no, explain: \_\_\_\_\_

Additional comments: \_\_\_\_\_

Underlined\* -refer to dentist immediately

**Oral Health Assessment Tool for Dental Screening** (modified from Kayser-Jones et al (1995) by Chalmers (2004))

Client: _____		Completed by: _____		Date: ___/___/___
<b>Scores</b> – You can circle individual words as well as giving a score in each category and can write notes in the category scores column also				
Category	0 = healthy	1 = changes *	2 = unhealthy *	Category scores
Lips	smooth, pink, moist	dry, chapped, or red at corners	swelling or lump, white/red/ulcerated patch; bleeding/ulcerated at corners	
Tongue	normal, moist roughness, pink,	patchy, fissured, red, coated	patch that is red &/or white, ulcerated, swollen	
Gums and tissues	pink, moist, smooth, no bleeding	dry, shiny, rough, red, swollen, one ulcer/sore spot under dentures	swollen, bleeding, ulcers, white/red patches, generalized redness under dentures	
Saliva	moist tissues, watery and free flowing saliva	dry, sticky tissues, little saliva present, resident thinks they have a dry mouth	tissues parched and red, very little/no saliva present, saliva is thick, resident thinks they have a dry mouth	
Natural teeth Yes/No	no decayed or broken teeth/roots	1-3 decayed or broken teeth/ roots or very worn down teeth	4 + decayed or broken teeth/roots, or very worn down teeth, or less than 4 teeth	
Dentures Yes/No	no broken areas or teeth, dentures regularly worn, and named	1 broken area/ tooth or dentures only worn for 1-2 hrs daily, or dentures not named, or loose	more than 1 broken area/tooth, denture missing or not worn, loose and needs denture adhesive, or not named	
Oral cleanliness	clean and no food particles or tartar in mouth or dentures	food particles/ tartar/ plaque in 1-2 areas of the mouth or on small area of dentures or halitosis (bad breath)	food particles/tartar/plaque in most areas of the mouth or on most of dentures or severe halitosis (bad breath)	
Dental pain	no behavioral, verbal, or physical signs of dental pain	are verbal &/or behavioral signs of pain such as pulling at face, chewing lips, not eating, aggression	are physical pain signs (swelling of cheek or gum, broken teeth, ulcers), as well as verbal &/or behavioral signs (pulling at face, not eating, aggression)	
<input type="checkbox"/> * Refer person to have a dental examination by a dentist <input type="checkbox"/> Person and/or family/guardian refuses dental treatment <input type="checkbox"/> Complete Oral Hygiene Care Plan and start oral hygiene care interventions for person <input type="checkbox"/> Review this person's oral health again on Date: ___/___/___				<b>TOTAL SCORE: 16</b>

### Oral Health Assessment Tool for Dental Screening

PAZIENTE		DATA		CODICE
CATEGORIA	0 = SANO	1 = ALTERATO	2 = PATOLOGICO	
<b>Labbra</b>	lisce, rosee, umide	asciutte, screpolate o rosse agli angoli	gonfie, sanguinanti o ulcerate agli angoli	
<b>Lingua</b>	normale, umida, rosea	irregolare, fissurata, rossa, patinata	Chiazze rosse o biancastre, ulcerata, gonfia	
<b>Gengive e Tessuti molli</b>	rosei, umidi, lisci, nessun sanguinamento	asciutti, lucidi, rossi, gonfi, ulcerati o irritati sotto la dentiera	tessuti, sanguinanti, zone ulcerate biancastre/rosse, rossore generalizzato sotto le dentiere	
<b>Saliva</b>	Tessuti umidi, saliva acquosa	Tessuti asciutti, scarsa saliva, bocca secca	Tessuti secchi e rossi, assenza di saliva, il paziente riferisce di avere la bocca secca	
<b>Denti naturali</b>	Nessun dente mancante, nessun dente/radice rotta	Da 1 a 3 denti mancanti o radici rotte	4 o più denti mancanti o radici rotte	
<b>Protesi</b>	Nessuna rottura, dentiera portata regolarmente	1 area rotta, dentiera portata solo 1-2 ore al giorno, mobilità della protesi	Più di una area rotta, dentiera non portata mai o con necessità di adesivi	
<b>Igiene Orale</b>	Cavo orale pulito, non frammenti di cibo, non tartaro	Presenza di tartaro e di frammenti di cibo, alitosi	Marcata presenza di cibo e tartaro, severa alitosi	
<b>Dolore dentale</b>	Nessun segno verbale, fisico o comportamentale di dolore	Segni verbali e comportamentali di dolore, rifiuto del cibo, aggressività	Segni fisici di dolore (ulcere, denti rotti, gonfiore) e segni verbali e comportamentali (rifiuto cibo, aggressività...)	
				<b>TOTALE</b>
				_____/16

# VALUTAZIONE IGIENE ORALE

## IGIENE DEL CAVO ORALE

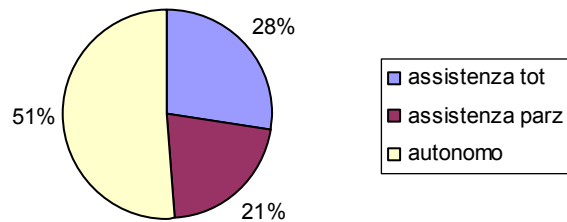
- 1) Senza assistenza
- 2) Necessita di aiuto
- 3) Richiede assistenza totale

1

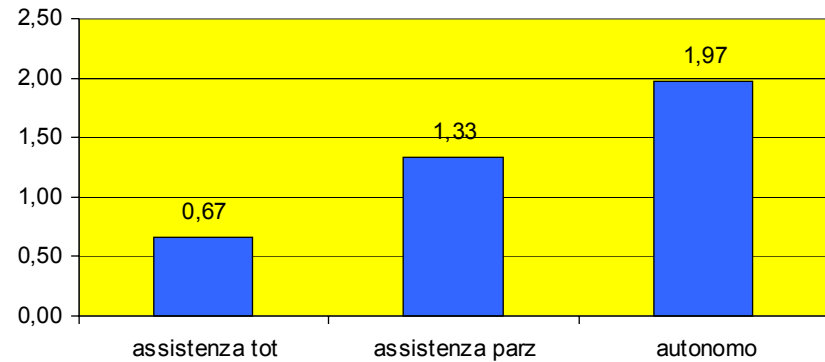
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### AUTOSUFFICIENZA NELL'IGIENE DEL CAVO ORALE



### FREQUENZA IGIENE ORALE



GRAZIE PER L'ATTENZIONE

