

Appendix A: Brief Oral Health Status Examination (BOHSE)

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 (eg., 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 (eg., 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 & roof of mouth	Observe, feel tissue and ask resident, family or staff (eg., primary caregiver)	Pink and moist	Dry, shiny, rough, red or swollen*	White or red patch, bleeding, hardness or ulcer for 2 weeks*
Gums between teeth &/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 1-6 teeth; one red area or sore spot under artificial teeth*	Swollen or bleeding gums, redness at border around 7 or more teeth, loose teeth, generalized redness or sore under artificial teeth*
Saliva (effect on tissue)	Touch tongue blade to centre 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, feel tissue and ask resident, family or staff (eg., primary caregiver)	Unbroken teeth; worn most of the time	1 broken/missing tooth, or worn for eating or cosmetic purposes 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 and 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

* Refer to dentist immediately

Appendix B: Oral Health Assessment Tool for dental screening

Oral Health Assessment Tool for dental screening (modified from Kayser-Jones et al (1995) by Chalmers (2000))

Resident: _____ Room: _____ Study ID _____

Baseline / 3-mths / 6-mths
(please circle)

Completed by: _____
Date: ____/____/____

Category	Scores (* if score 1 or 2 for any category please arrange for a dentist to assess the resident)		Category scores
	0 = healthy	1 = changes * 2 = unhealthy *	
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, generalised 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	no decayed or broken teeth/roots	1-3 decayed or broken teeth/roots	4 + decayed or broken teeth/roots, or less than 4 teeth
Dentures	no broken areas or teeth, dentures regulary worn, and named	1 broken area/ tooth or dentures only worn for 1-2 hrs daily, or dentures not named	more than 1 broken area/tooth, denture missing or not worn, needs denture adhesive, or not named
Oral cleanliness	clean and no food particles or tartar in mouth or on dentures	food particles/ tartar/ plaque in 1-2 areas of the mouth or on small area of dentures	food particles/tartar/plaque in most areas of the mouth or on most of dentures
Dental pain	no behavioural, verbal, or physical signs of dental pain	are verbal &/or behavioural 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 behavioural signs (pulling at face, not eating, aggression)
Please tick this box if the resident was referred to a dentist after screening <input type="checkbox"/>			TOTAL SCORE ____/16

Appendix C: Oral Hygiene Care Plan used in study

Oral Hygiene Care Plan (Chalmers, 2000)	
Resident: _____ Study ID: _____ baseline / 3-mth / 6-mth Completed by: _____ Date: ___/___/___ (please circle)	
Dentist: <i>public or private</i> (please circle) Name: _____ Phone: _____	
List all dental appointments: _____ Staff to help with oral hygiene care problems: _____	
Dentures: (please circle)	Full / Partial / Not worn / No denture / Named Attempt denture cleaning: <input type="checkbox"/> daily <input type="checkbox"/> when possible
Natural teeth: (please circle)	Full / Partial / Not worn / No denture / Named Best time to clean dentures: _____ Yes / No / Roots present Attempt teeth cleaning <input type="checkbox"/> daily <input type="checkbox"/> when possible Yes / No / Roots present Best time to clean teeth : _____
Types and frequency of assistance needed with oral hygiene care (please tick all that apply and circle frequency required)	<input type="checkbox"/> no assistance needed <input type="checkbox"/> reminding / prompting / task breakdown needed <input type="checkbox"/> supervision/checking of oral hygiene needed <input type="checkbox"/> full assistance needed from staff <input type="checkbox"/> use bridging / chaining / distraction techniques <input type="checkbox"/> use electric / suction toothbrush <input type="checkbox"/> use backward bent toothbrush for access <input type="checkbox"/> use biteblock <input type="checkbox"/> use chlorhexidine spray bottle/gel <i>daily/weekly</i> <input type="checkbox"/> use fluoride spray bottle/gel <i>daily/weekly</i> <input type="checkbox"/> use Neutraflour 5000 toothpaste <i>daily/weekly</i> <input type="checkbox"/> use Oral Balance gel for dry mouth <input type="checkbox"/> other _____
Regular problems with oral hygiene care: (please tick all that apply)	<input type="checkbox"/> forgets to do oral hygiene care <input type="checkbox"/> won't open mouth <input type="checkbox"/> refuses oral hygiene care <input type="checkbox"/> does not understand <input type="checkbox"/> is aggressive / kicks / hits <input type="checkbox"/> can't swallow properly <input type="checkbox"/> can't rinse and spit <input type="checkbox"/> bites toothbrush and/or staff <input type="checkbox"/> constantly grinding/chewing <input type="checkbox"/> head faces downwards <input type="checkbox"/> other _____

Appendix D: Facility score sheet used at baseline and 6 months

Facility issue	0	1	2	3	Score
1. Are there written oral and dental policies and procedures for the facility?	None were evident	Yes, but inadequate (ie, less than required by dental standard)	Yes, adequate (ie, equivalent to dental standard)	Yes, more than adequate (ie, more than required by dental standard)	
2. Was continuing education (CE) in oral health held in prior 12 months?	None was held	Yes, 1 session	Yes, 2 sessions	Yes, 3 or more sessions	
3. What was the CE format?	None was held	Lecture only	Hands-on /practical discussion	Oral care demonstrations with residents	
4. Is there a contact list of public dentists/clinics?	None	Yes, but inadequate (ie, less than required by dental standard)	Yes, adequate (ie, equivalent to dental standard)	Yes, more than adequate (ie, more than required by dental standard)	
5. Is there a contact list of private dentists?	None	Yes, but inadequate (ie, less than required by dental standard)	Yes, adequate (ie, equivalent to dental standard)	Yes, more than adequate (ie, more than required by dental standard)	
6. Are oral assessments completed for new residents by staff?	None	Yes, but inadequate (ie, only as requested)	Yes, adequate (ie, is required for some residents)	Yes, more than adequate (ie, is required for all residents)	
7. Are oral assessments completed for new residents by a dentist?	None	Yes, but inadequate (ie, only as requested)	Yes, adequate (ie, is required for some residents)	Yes, more than adequate (ie, is required for all residents)	
8. Do staff complete oral assessments regularly/annually for residents ?	None	Yes, but inadequate (ie, only as requested)	Yes, adequate (ie, is required for some residents)	Yes, more than adequate (ie, is required for all residents)	
9. So dentists complete oral assessments regularly/annually for residents?	None	Yes, but inadequate (ie, only as requested)	Yes, adequate (ie, is required for some residents)	Yes, more than adequate (ie, is required for all residents)	
10. Is there an oral hygiene care plan in each resident's record?	None	Yes, but inadequate (ie, less than required by dental standard)	Yes, adequate (ie, equivalent to dental standard)	Yes, more than adequate (ie, more than required by dental standard)	
11. Is there a place in residents' records to list their dentist?	None	Yes, but inadequate (ie, less than required by dental standard)	Yes, adequate (ie, equivalent to dental standard)	Yes, more than adequate (ie, more than required by dental standard)	
12. Are there oral health initiatives in addition to the dental standard requirements in the facility?	None	Yes, good (ie., using preventive dental products such as fluorides)	Yes, very good (ie., dementia-specific oral care strategies)	Yes, excellent (ie., specific oral care staff allocated)	
Facility: _____ Facility Study ID: _____ TOTAL SCORE _____/36 Form completed by: _____ DATE: ____/____/03 baseline/6 months					

Appendix E: Focus group questionnaire



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A best-practice oral health model for Australian residential care

Focus Group Questionnaire

Date of focus group ___/___/___ Conducted by: _____

Residential Care Facility: _____

Please circle: 3-months / 6-months

Appendix E: Focus group questionnaire (continued)

Oral Assessment Tool		Strongly Disagree	Disagree	Agree	Strongly Agree
1.	I feel knowledgeable and prepared to use the Oral Assessment Tool.	1	2	3	4
2.	Using the Oral Assessment Tool improves my ability to detect dental pain and problems in residents' mouths.	1	2	3	4
3.	I had enough time to learn about the Oral Assessment Tool before it was implemented.	1	2	3	4
4.	I feel supported in my efforts to implement the Oral Hygiene Care Plan for residents.	1	2	3	4
5.	I am able to complete the "lips" category of the Oral Assessment Tool.	1	2	3	4
6.	I am able to complete the "tongue" category of the Oral Assessment Tool.	1	2	3	4
7.	I am able to complete the "gums and tissues" category of the Oral Assessment Tool.	1	2	3	4
8.	I am able to complete the "saliva" category of the Oral Assessment Tool.	1	2	3	4
9.	I am able to complete the "natural teeth" category of the Oral Assessment Tool.	1	2	3	4
10.	I am able to complete the "dentures" category of the Oral Assessment Tool.	1	2	3	4
11.	I am able to complete the "oral cleanliness" category of the Oral Assessment Tool.	1	2	3	4
12.	I am able to complete the "dental pain" category of the Oral Assessment Tool.	1	2	3	4
		Strongly Disagree	Disagree	Agree	Strongly Agree

Appendix E: Focus group questionnaire (continued)

Oral Hygiene Care Plan		Strongly Disagree	Disagree	Agree	Strongly Agree
13.	I feel knowledgeable and prepared to use the Oral Hygiene Care Plan.	1	2	3	4
14.	Using the Oral Hygiene Care Plan enhances the quality of oral hygiene care I provide for residents.	1	2	3	4
15.	I had enough time to learn about the Oral Hygiene Care Plan before it was implemented.	1	2	3	4
16.	I feel supported in my efforts to implement the Oral Hygiene Care Plan for residents.	1	2	3	4
17.	I am able to complete the “dentist details” section of the Oral Hygiene Care Plan.	1	2	3	4
18.	I am able to complete the “dentures” section of the Oral Hygiene Care Plan.	1	2	3	4
19.	I am able to complete the “natural teeth” section of the Oral Hygiene Care Plan.	1	2	3	4
20.	I am able to complete the “assistance with oral hygiene care” section of the Oral Hygiene Care Plan.	1	2	3	4
21.	I am able to complete the “regular problems with oral hygiene care” section of the Oral Hygiene Care Plan.	1	2	3	4
		Strongly Disagree	Disagree	Agree	Strongly Agree

How many minutes did it usually take you to complete the

Oral Health Assessment Tool: _____ minutes

Oral Hygiene Care Plan: _____ minutes

Appendix E: Focus group questionnaire (continued)

Please comment about any problems you have been having when using the

Oral Health Assessment Tool:

Please comment about any problems you have been having when using the

Oral Hygiene Care Plan:

Thank you very much for assistance with completing this questionnaire.

Appendix F: Final Oral Health Assessment Tool

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

Resident: _____		Completed by: _____		Date: ___/___/___	
Scores — You can circle individual words as well as giving a score in each category (* if 1 or 2 scored for any category please organise for a dentist to examine the resident)					
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/sores spot under dentures	swollen, bleeding, ulcers, white/red patches, generalised 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 behavioural, verbal, or physical signs of dental pain	are verbal &/or behavioural 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 behavioural signs (pulling at face, not eating, aggression)		
<input type="checkbox"/> Organise for resident to have a dental examination by a dentist <input type="checkbox"/> Resident and/or family/guardian refuses dental treatment <input type="checkbox"/> Complete Oral Hygiene Care Plan and start oral hygiene care interventions for resident <input type="checkbox"/> Review this resident's oral health again on Date: ___/___/___				TOTAL SCORE: 16	

Appendix G: Final Oral Hygiene Care Plan

Oral Hygiene Care Plan (OHCP) (Chalmers, 2004)

Resident: _____		Completed by: _____		Date: ___/___/___	
Dentist: <i>public or private (please circle)</i> Name: _____		Phone: _____			
List all dental appointments: _____					
Dentures: <i>(please circle)</i>	Upper	Full / Partial / Not worn/ No denture Named/ Not named	Does/doesn't wear at night	Attempt denture cleaning: <input type="checkbox"/> daily <input type="checkbox"/> when possible	
	Lower	Full / Partial / Not worn/ No denture Named/ Not named	Does/doesn't wear at night		
Natural teeth: <i>(please circle)</i>	Upper	Yes / No / Roots present		Attempt teeth cleaning: <input type="checkbox"/> daily <input type="checkbox"/> when possible	
	Lower	Yes / No / Roots present			
Interventions for oral hygiene care <i>(tick all that apply and circle frequency needed)</i>	<input type="checkbox"/> is independent and no assistance needed <input type="checkbox"/> needs reminding / prompting / task breakdown <input type="checkbox"/> needs supervision/ checking of oral hygiene <input type="checkbox"/> needs full assistance from staff <input type="checkbox"/> use bridging / chaining / distraction techniques <input type="checkbox"/> use electric / suction toothbrush <input type="checkbox"/> use toothbrush <i>normal/backward bent/ 2 toothbrushes</i> <input type="checkbox"/> use chlorhexidine <i>spray bottle/gel</i> <i>daily/weekly</i> <input type="checkbox"/> use fluoride <i>gel/mouthrinse in spray bottle</i> <i>daily/weekly</i> <input type="checkbox"/> use regular 1000ppm toothpaste <input type="checkbox"/> use extra-strength 5000ppm toothpaste <i>daily/weekly</i> <input type="checkbox"/> scrub denture/s with soap and water <i>morning/night</i> <input type="checkbox"/> soak denture/s at night in <i>water/denture tablet</i> <input type="checkbox"/> use saliva substitute for dry mouth <input type="checkbox"/> other _____ <input type="checkbox"/> other _____			Regular problems with oral hygiene care : <i>(tick all that apply)</i>	<input type="checkbox"/> forgets to do oral hygiene care <input type="checkbox"/> refuses oral hygiene care <input type="checkbox"/> won't open mouth <input type="checkbox"/> no compliance with directions <input type="checkbox"/> is aggressive / kicks / hits <input type="checkbox"/> bites toothbrush and/or staff <input type="checkbox"/> can't swallow properly <input type="checkbox"/> can't rinse and spit <input type="checkbox"/> constantly grinding/chewing <input type="checkbox"/> head faces downwards / moves <input type="checkbox"/> won't take dentures out at night <input type="checkbox"/> other _____ <input type="checkbox"/> other _____ <input type="checkbox"/> other _____

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