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ORIGINAL ARTICLE

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Residential age care and domiciliary oral health services: *Reach-OHT*—The development of a metropolitan oral health programme in Sydney, Australia

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Objective: To describe an oral health care programme for older people in Residential Aged Care Facilities (RACFs) to improve access to care and support facilities.

Introduction: Different models of residential care have been proposed, but few have been comprehensive (providing on-site health promotion and service delivery) or sustainable.

Methods: A partnership model of oral health care, with dental services plus oral health education, was integrated into the community outreach services of a metropolitan hospital department of aged care. The programme provided annual oral health education and training to staff, and on-site dental care to 10 (RACFs).

Results: None of the RACFs had received organised education or on-site dental service care prior to the programme. At the completion of the third year of the programme, 607 residents (75% of the total bed capacity for the 10 RACFs) had received an annual oral health assessment, and 271 (46.5%) had received on-site dental care. More than 120 nursing and allied health staff had received education and training in oral health support to residents. Oral cleanliness, the proportion not experiencing dental pain and referral for additional care decreased significantly over the period, but dental caries experience and periodontal conditions remained a concern.

Conclusions: Sustainable domiciliary oral health services and oral health education are feasible and practical using a partnership model within the Australian health system. Adaptability, continuity and the use of oral health therapists/dental hygienists in the coordination and management of the programme further contribute to viability.

KEYWORDS
access to public dental services, aged care, domiciliary oral health care, population oral health

1 | INTRODUCTION

Australia's population, like many nations, is ageing population and faces challenges in the provision of adequate and appropriate oral health care for its older peoples.[1] Residents in Australian nursing homes (Residential Aged Care Facilities, RACFs) have been identified as a particularly vulnerable subpopulation of elderly people with high oral health needs and limited access to dental care.[2-5]

More than 83% of dentists in Australia operate from private dental practices.[6] State and Federal government expenditure on dental care in Australia is targeted largely to children, veterans and low-income adults.[7] Although the dental needs and access to oral health care of frail older Australians care have been well documented,[8-10] few organised programmes have been introduced at a Federal or State level. In 2009, the Australian Government introduced the Better Oral Health in Residential Care education and training

programme (BOHRC) which provided one-off funding to RACFs for materials and staff training in oral health promotion for residents.[11] The BOHRC Programme provided some 7000 aged care workers in 2800 RACFs with oral health education training and materials.[12]

New South Wales (NSW) has approximately 66 500 residents within 878 aged care facilities.[13] A NSW study by Webb et al.[14] reported that only 48% of residents had received a dental assessment on admission to residence within a RACF and that 74.2% of facilities did not provide any mechanism for regular dental visits by dental providers. Long waiting lists for public dental care were seen by 79.0% of respondents to be a barrier to good oral health, and 64.6% of respondents saw their mobility as a major barrier to dental care.

The aim of this study was to develop an on-site oral health assessment, education and service delivery programme to improve the access to oral health care for older people living in RACFs. The programme was embedded within the Concord Repatriation General Hospital's (CRGH) geriatric medicine department and was supported by a mix of public and private dental providers. A governance structure was established by CRGH which oversaw the development, reporting and quality assurance of the Programme. The key elements of the reporting frame captured information of residents demographical, physical and behavioural characteristics as well as oral health data on oral hygiene, dental decay and saliva.

2 | METHODS

The framework for the *Reach-OHT** model was built around six core elements. First, that the programme was integrated into geriatric health care of RACF services within the Local Health District. This meant that the programme was directly linked into the infrastructure of geriatric medicine through the Residential Aged Care Collaborative Committee of CRGH. This Committee links the local RACFs to the Department of Aged, Chronic Care and Rehabilitation (ACC&R) with geriatric medicine and the CRGH support networks. Second, the programme had to provide the physical, administrative and coordination elements between RACFs, the supportive geriatric medicine network and dental providers. This element of the programme used a public-private arrangement whereby the public sector provided and maintained a basic set of portable dental hardware which comprised a lay-back wheel chair, a dental unit, operating stools and a portable radiography unit. Co-ordination for the programme activities was the responsibility of a public sector oral health therapist, and administrative (consent, payment structure, regulatory requirements) and governance aspects of the programme were monitored and advised by a Geriatric Dentistry Advisory Group with accountability links through to the General Manager of CRGH. Third, the programme was based on an assertion that local RACFs would reflect the transition of local residents into supported care, and consequently reflect previous dental care received from local dental providers. The principle here was that continuity of dental care could be maintained by local dental providers moving to support their patients after the patient's admission to residential aged care (and others within a RACF without an available dental provider). Fourth, the programme identified pathways of dental care from oral health assessment, through the provision of on-site core dental services and referral pathways to specialist clinical care should that be required. Specific pathways were developed for both eligible (public) and non-eligible patients. Specialist referral pathways were developed with the Special Care Department at Sydney Dental Hospital or private specialists. Fifth, that the service elements of the programme would be supported by an on-going education and training programme for RACF staff and assistance with preparing individualized daily oral health care plans, and finally, that an "action evaluation approach" would be taken to guide changes within the programme and facilitating problem-solving.[15]

Initial funding for the programme and governance arrangements was agreed between NSW Health, Sydney Local Health District and the Centre for Education and Research on Ageing in 2011. Local dentists were recruited into the Programme with the support of the Australian Dental Association (NSW), and two workshop sessions were held with local private practitioners to familiarize them with the equipment and processes. Twelve local private dentists attended these sessions and formed the basis for selecting the initial dental providers to work within the RACFs. Five RACFs linked to the Residential Aged Care Collaborative Committee of CRGH volunteered to participate in the Programme during its establishment. The programme team (Associate Director (Oral Health), Project Manager and Co-ordinating OHT) made site visits to the potential RACFs and discussed issues of administration of the programme, the site requirements for accommodating equipment and staff and prepared the necessary contractual, consent, medical history and data management documentation.

Aged care facilities were recruited from the CRGH Collaborative Committee as a convenience sample. The sample was selected incrementally over a 3-year period. It was anticipated that the resources available to the programme would provide for the participation of a maximum 10 RACFs of moderate size (80-120 residents). These 10 facilities provided a total bed capacity for 804 residents.

Data were collected by the oral health therapist using the Oral Health Assessment Tool (OHAT) as described in the BOHRC education and training manuals, and based on the original work of Chalmers et al.[16] The OHAT records oral information in eight areas or conditions, according to whether the area/condition is in a healthy, changed state, or clearly unhealthy state. Although the OHAT was designed for use by nurses and general medical practitioners, it is a simple tool to explain oral health to residents and RACF staff. Additional intraoral information was recorded by the oral health therapist on a standard odontogram and the triaging decision to refer for treatment by a dentist or dental prosthetist was made by the oral health therapist at the assessment session. Any preventive and/or maintenance care, within the scope of practice of the oral health therapist, such as the removal of calculus and cleaning of the resident's teeth was also made at this assessment appointment.

The Australian Schedule of Dental Services and Glossary[17] was used to collate all services delivered to public dental care residents. The Schedule lists dental services under 10 categories and subcategories.

Reach-OHT is the "brand name" accorded to the Inner West Oral Health Outreach Program. The OHT refers to the major coordinating and monitoring role of Oral Health Therapists in the programme.

The major categories are as follows: diagnostic services; preventive, prophylactic and bleaching services; periodontics; oral surgery; endodontics; restorative services; prosthodontics; orthodontics; general service s; and miscellaneous items. This schedule is then used by the Local Health District for reimbursement to private dental providers listed on their Eligible Practitioner list for fee-for-service items under the NSW Health Oral Health Fee for Service Scheme.[18] Under this scheme the Local Health District can issue a voucher for private practitioners to provide dental care to public patients at the defined reimbursement price.

The first out-reach service was provided in March 2013 with two other facilities entering the Programme that year. With the recruitment of two oral health therapists, the programme expanded in 2014 to add a further five RACFs, and finally in 2015, an additional three facilities entered the programme. Recruitment of additional dentists and two dental prosthetists followed such that 10 RACFs were receiving the core service and education aspects of the programme, by 2016, and one RACF was receiving the education and training elements only.

All data collected from the OHAT and dental services records were coded and transferred to an Excel spreadsheet. Descriptive analyses were performed by SAS software 9.3 (SAS Institute Inc, Cary, NC, USA). The 0.05 level of significance was set as the threshold for rejection of the Null Hypothesis for Chi-squared analyses.

3 | RESULTS

None of the 10 RACFs within the programme had previously received on-site dental care or on-site oral health education and training sessions.

Table 1 summarises the basic information collected at the assessment visit.

3.1 | Access and services

Aggregate data were available from 607 residents (75.5%) of the total bed capacity for the 10 participating RACFs who received an oral health assessment between January 1st and December 31st 2016. Overall, the mean age of residents assessed was 86.9 years, with 69.9% female. Over 83.2% of the residents assessed (n=505) were either full or part pension card holder or therefore eligible for public dental care. A total of 275 residents (45.3%) were referred for on-site dental care by one of the participating private dentists or dental prosthetists.

Table 2 shows aggregate data derived from the OHAT assessment of the residents' physical and mental capacities to communicate, walk unaided and perform daily oral hygiene. Over half of the residents (59.1%) required either complete or partial assistance with daily oral hygiene practices, and 81.5% of residents were physically dependant on others for assistance with general health and mobility care. Only 13.3% of residents assessed (n=77) were non-verbal, and 14.3% posed challenging or difficult behaviours. Comparison of resident profiles over the 3-year period 2014-2016 showed a relatively constant level of communication skills, but the proportion of residents' physical and mental skills deceased from 26.5% being independent in 2014 to only 18.5% in 2016. In contrast the proportion of residents' capacity to practise daily oral hygiene increased from 28.9% in 2014 to 40.9% in 2016—notwithstanding that the proportion that was totally dependent on assistance remaining relatively unchanged during the 3-year period.

TABLE 1 Summary of data collected at the initial Oral Health Assessment of residents

Parameter	Description
Residents' demographical information	Age
	Gender
	Location
	Medicare number
Eligibility status	Pensioner concession
	DVA
	Non-pensioner (Fee-paying, PHI)
Ability to practise daily oral hygiene	Independent
	Needs reminding/supervision
	Needs full assistance
Physical condition	Independent
	Partially dependent
	Totally dependent
Level of communication	Able to communicate
	Confused
	Non-verbal
Behavioural complications	No difficulties
	Difficult behaviours evident
Intra/extra-oral findings	Saliva
	Decay experience
	Denture status
Oral hygiene status	Good
	Fair
	Poor
Observed/reported dental pain	Yes
	No
Referral	Required
	Not required

Table 3 summarises the OHAT findings for the 558 residents completing the oral health assessment in 2016. The key findings across the 10 RACFs relate to periodontal and oral tissues, saliva, decay experience, oral cleanliness and pain experience. Only 5.6% of residents had unhealthy periodontal or oral mucosal tissues, while a further 31.0% showed signs of changes to these tissues. Salivary consistency and flow were reported as unhealthy in 7.0% of residents with a further 42.5% having a reduced flow or consistency which could increase their risk to dental decay or periodontal diseases. Only 47.0% of residents appeared free from active dental decay, and 39.3% had either unhealthy levels of oral cleanliness or a level of risk concern. Ninety-four per cent of residents had not experienced dental pain, and only 0.4% reported acute pain, although 5.7% had experienced mild pain at various times.

TABLE 2 Physical and mental capacity indicators of residents in 2016 (aggregate data from 10 RACFs)

Physical and mental capacities/extent	Independent		Partially dependent		Fully dependent	
	N	%	N	%	N	%
Participants' ability to practise daily oral hygiene (n=552)	237	40.9	140	24.2	202	34.9
Participants' physical condition (n=553)	107	18.5	259	44.8	212	36.7
Participants' level of communication (n=551)	351	60.7	150	6.0	77	13.3
Participants' behavioural complication (n=550)	496	85.7	0	0.0	83	14.4

TABLE 3 Eight oral health assessment indicators of residents' status. Jan-Dec 2016 (Aggregate data from 10 RACFs)

Parameter/condition	Healthy		Changed		Unhealthy	
	N	%	N	%	N	%
Lips (n=558)	503	90.1	55	9.9	0	0.0
Tongue (n=558)	431	77.2	123	22.0	4	0.7
Gums & oral tissues (n=558)	354	63.4	173	31.0	31	5.6
Saliva (n=558)	282	50.5	237	42.5	39	7.0
Decay experience (n=400)	188	47.0	167	41.8	45	11.3
Denture (n=270)	254	94.1	14	5.2	2	0.7
Oral cleanliness (n=558)	339	60.8	156	28.0	63	11.3
Pain experience (n=558)	524	93.9	32	5.7	2	0.4

TABLE 4 Changes in the proportion of residents with healthy or unhealthy gum and oral tissues over three assessment periods 2014, 2015 and 2016[a]

Year/condition	Overall N	Healthy		Changed		Unhealthy	
		N	%	N	%	N	%
2014	274	174	63.3	93	3.8	8	2.9
2015	594	436	73.4	136	22.9	22	3.7
2016	558	354	63.4	166	31.0	31	5.6

[a]Chi-square=19.51; 4 *df*; *P*<.001.

Table 4 shows over the 3-year period, a relatively constant pattern of health, change and unhealthy distribution of periodontal and mucosal tissue conditions. The proportion of unhealthy, and changed categories increased and the proportion of healthy participants had decreased by the third year. Table 5 shows an increase in concern regarding flow and consistency of saliva across the 3-year period. The proportion of those with little or no saliva has increased from 1.1% in 2014, to 3.9% in 2015 and 7.0% in 2016. The proportion of those with high levels of unmet dental decay (Table 6) fluctuated over the 3-year period. The different rates or those presenting with better levels of oral cleanliness (Table 7) ranged from a low of 46.2% in 2014 presenting with clean (healthy) teeth and oral tissues, to 51.5% in 2014 to 60.9% estimated to have a clean healthy mouth in 2016. Similarly, the pattern of presenting with dental pain at the oral health assessment, or with a previous history of pain dropped in both categories, illustrating an increase in proportion of those residents not experiencing dental pain from 85.6% in 2014, to 87.9% in 2015 and 94.0% in 2016 (χ^2=26.0; 4 *df*; *P*<.001).[†]

Finally, referral patterns from the public oral health therapist to the private clinical provider also changed over the 3-year period. In 2014,

TABLE 5 Changes in the proportion of residents with moist, dry or little saliva over three assessment periods 2014, 2015 and 2016[a]

Year/condition of saliva	Overall N	Moist		Dry		Little or no saliva	
		N	%	N	%	N	%
2014	274	176	64.0	96	34.9	3	1.1
2015	594	425	71.5	146	24.6	23	3.9
2016	558	282	50.5	237	42.5	39	7.0

[a]Chi=63.48; 4 *df*; *P*<.001.

TABLE 6 Changes in the proportion of residents with number of decayed surfaces over three assessment periods 2014, 2015 and 2016[a]

Year/decay experience	Overall N	No decay		1-3 decayed teeth		4+ decayed teeth	
		N	%	N	%	N	%
2014	196	91	46.4	91	46.4	14	7.1
2015	437	212	48.5	167	38.2	58	13.3
2016	400	188	47.0	167	41.8	45	11.3

[a]Chi-square=6.93; 4 *df*; P=0.14.

TABLE 7 Changes in the proportion of residents with clean, fair or poor oral cleanliness over three assessment periods 2014, 2015 and 2016[a]

Year/oral cleanliness	Overall N	Clean		Fair		Poor	
		N	%	N	%	N	%
2014	273	126	46.2	101	37.0	46	16.8
2015	592	305	51.5	196	33.1	91	15.4
2016	55	339	60.9	156	28.0	62	11.1

[a]Chi-square=19.42; 4 *df*; *P*<.001.

[†]Further information and details of data analyses are available from the authors.

66.4% of residents (n=351) were referred for dental practitioner care; in 2014, 54.6% of residents (n=546) were referred, and in 2016, only 46.5% required referral for basic dental treatment (Chi-square=34.29; at 2 degrees of freedom; *P*<.001). There were also low referral rates (<2.0%) for emergency or special dental care to either Sydney Dental Hospital or a fully equipped dental clinic.

Residents who did not qualify for public dental care, but were assessed by the oral health therapists as requiring dental treatment, were referred either to their own private dental practitioner, or to the programme's private dental practitioner should they not have their own dentist/dental prosthetist. The programme practitioner dealt independently with residents who were not eligible for public dental care within the same on-site arrangements, or through arrangements agreed between the resident and/or their legal guardian. Data on this small group of referrals were not collected within the programme data base.

Of the 555 public dental service eligible residents referred for dental services under the programme (72.5% of the total eligible/non-eligible referred)—560 diagnostic services and 362 preventive services were claimed. This represented 73.8% of all dental services provided by the private dental practitioners. Forty-six oral surgery services were provided, with half of these being extractions. The bulk of the clinical services was restorative—246 services or 19.6% of all dental services. The number of general services (which include travelling to the RACF site) n=38, prosthodontic services (n=13) and periodontic services (n=7) were relatively low in the 2016 period. In mapping the changes in service provision between 2015 and 2016, the data revealed an increase in the total number of services provided by 34.0%, with this increase being associated largely with an increase in diagnostic (43.2% increase) and preventive services (44.2% increase). Restorative services decreased slightly while prosthodontic services decreased from n=307 in 2015, to n=143 in 2016; a 46% reduction.

3.2 | Oral health education and staff training

Based on the BOHRC training programme, 19 educational sessions involving 123 nursing and aged care staff were conducted for all RACFs during 2015. The sessions on average took 1-2 hours and were arranged such that staff could attend the sessions during their "change-over" period. The content of the sessions included practical care of residents' natural teeth, dentures and supporting oral tissues as well as ensuring each resident had a personal daily oral health care plan.

4 | DISCUSSION

There have been a variety of models of care to RACFs which have been proposed and operating in the Australian environment.[19] However, regular access to dental care for those in Australian RACFs has remained a major barrier for residents.[5,14,20]

This paper reports on the process and development of a comprehensive domiciliary oral health programme to metropolitan aged care facilities in Sydney, Australia. The programme provided 75.5% of residents across 10 RACFs with an annual oral health assessment by an oral health therapist acting within their scope of practice under the Dental Board of Australia. More than half of these residents were also provided with core dental treatment services on-site within their own facility. The trends evident over the 3-year period of the operation on the programme show promising improvements in oral health outcomes for the residents and a potential to provide a sustainable private-public model of dental care for vulnerable and disadvantaged residents within urban RACFs. A greater emphasis should be placed on clinical prevention and diet management, and a closer monitoring of those residents with low saliva flow and dry mouth conditions should be written into daily oral health care plans.

This is a preliminary analysis of the impact and changes in oral health of residents, and there are limitations in drawing strong conclusions about the viability and sustainably of this model of care from the current analyses. Further data need to be collected over a longer time period, and analyses need to take into account the various confounding influences of reporting on aggregate data (such as severity of disability, continuity of care) compared with data comparisons based on individual units of change. While an action research approach has provided opportunity for the programme to respond to specific local RACF and practitioner needs and for policy makers to adapt delivery systems to local needs, there should be a more systematic research analysis of the outcomes and the influences of the many confounding factors on those outcomes. For example, the entry of new RACFs into the Programme 2014 and 2015 confounds comparison of data inferences across time periods as new residents enter and other residents leave the programme. Further research is proceeding to control for these influences.

With respect to nursing and carers' education and training having an impact on oral health, there appeared to be some evidence of improvements in the proportion of residents with "healthy" dental and mouth hygiene over the 3-year period. This too however, should be interpreted with caution as there are many confounding factors which need to be identified before any definitive conclusion can be drawn about the effectiveness of the oral health training component for staff. There is a body of evidence which indicates that education and training of staff, while important, is not sufficient to improve oral health outcomes, such as decreasing dental caries and periodontal diseases.[21]

The environment in which public dental services are delivered in Australia is another major limiting factor on sustainable domiciliary models of dental care. While it is the States and Territories which have the constitutional responsibility for delivering public dental services; policies, regulations and funding arrangements vary considerably by jurisdiction and in relationship to the funding stream from the Commonwealth. During the period in which this programme has been developed the Commonwealth has altered its dental funding arrangements with the States and Territories three times. At the outset, Commonwealth funds were available to States/Territories under the Medicare Chronic Disease Dental Scheme.[22]

The Commonwealth then ceased this programme and introduced a Medicare Teen Dental Programme funding stream.[23] The Teen Dental Programme was then replaced by the current Children's Dental Benefit Scheme.

The policy and practice implications for jurisdictions contemplating addressing the needs of dependant elderly people in domiciliary settings requires long-term commitments from governments and dental professions to form cooperative working relationships. Sustainability of initiatives such as the *Reach-OHT* programme also requires more rigorous analyses of data over a longer period of operational time. While this programme does demonstrate that domiciliary oral health care in RACFs can reduced inequities in the access of frail older citizens to dental care—further research needs to include control facilities and robust evaluation strategies. Further, cost-benefit research, along the lines described by Lunqvist et al.,[24] should be undertaken as part of these initiatives. Finally, while there has been a growth internationally of systems to enhance oral health care for frail elderly people, as MacEntee and his colleagues report,[25] there is little agreement on how such care should be regulated or financed. The model presented above, suggests that a "one-size" of model will not fit all circumstances and purposes. Policy and financial frameworks should be constructed to allow considerable flexibility and adaptability to meet local community and residential needs.

5 | CONCLUSIONS

A model of oral health care to aged care facilities, based on a public-private shared responsibility model, embedded within a general health care model for older residents in nursing homes and with chronic medical and disability needs has been described. The model shows high potential for reducing access barriers for residents in aged care facilities and improving oral health outcomes. Sustainability of such initiatives to reduce inequalities and inequities in access to dental care and improving oral health for seniors needs more detailed health economic and outcome-based research.

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CONFLICT OF INTEREST

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REFERENCES

1. Hopcraft MS. Dental demographics and metrics of oral diseases in the ageing Australian population. *Aust Dent J*. 2015;60(1 Suppl):2-13.
2. Chalmers JM, Hodge C, Fuss JM, Spencer AJ, Carter KD. The prevalence and experience of oral diseases in Adelaide nursing home residents. *Aust Dent J*. 2002;47:123-130.
3. Chalmers JM, Carter KD, Spencer AJ. Caries incidence and increments in Adelaide nursing home residents. *Spec Care Dentist*. 2005;25:96-105.
4. Hopcraft MS, Morgan MG, Satur JG, Wright FAC, Darby IB. Oral hygiene and periodontal disease in Victorian residential aged care facilities. *Gerodontology*. 2012;29:E220-E228.
5. Silva M, Hopcraft M, Morgan M. Dental caries in Victorian nursing homes. *Aust Dent J*. 2014;59:1-8.
6. Chrisopoulos S, Beckwith K, Harford JE. *Oral Health and Dental Care in Australia: Key Facts and Figures 2011*. Cat. no. DEN 214. Canberra: AIHW; 2011. p 40.
7. Centre for Oral Health Strategy. *Eligibility for Public Dental Care*. http://www.health.nsw.gov.au/oralhealth/Pages/eligibility.aspx. Accessed 21 March 2017.
8. Australian Government. *Australia's National Oral Health Plan 2015-2014*. Canberra: COAG Health Council; 2015. p 65.
9. Centre for Oral Health Strategy. *Oral Health 2020: A Strategic Framework for Dental Health in NSW*. Sydney: NSW Ministry of Health; 2013. p 11.
10. Australian Dental Association. *Pensioner/Elderly Dental Benefit Scheme*, 2016. https://www.treasury.gov.au/~/media/Treasury/Consultations%20and%20Reviews/Consultations/2015/2016%20Pre%20Budget%20submissions/Submissions/PDF/Australian%20Dental%20Association.ashx. Accessed March 21, 2017.
11. Australian Government: Better Oral Health in Residential Care Program. 2009. https://agedcare.health.gov.au/publications-articles/resources-learning-training/better-oral-health-in-residential-care-training. Accessed 21 March 2017.
12. Masso M, Westera A, Quinsey K, Morris D, Pearse J. *Encouraging Best Practice in Residential Aged Care Program: Final Evaluation Report*. Centre for Health Service Development: The University of Wollongong; 2011.
13. Australian Government: Department of Social Services. *2013-2014 Concise Facts & Figures in Aged Care*. https://agedcare.health.gov.au/tools-and-resources/ageing-and-aged-care-research-and-statistics/general-ageing-and-aged-care/2013-14-concise-facts-figures-in-aged-care. Accessed 30 March 2017.
14. Webb BC, Whittle T, Schwarz E. Provision of dental care in aged care facilities, NSW, Australia—Part 1 as perceived by the Directors of Nursing (care providers). *Gerodontology*. 2013;30:226-231.
15. Boyd A, Cole DC, Cho D-B, Aslanyan G, Bates I. Frameworks for evaluating health research capacity strengthening: a qualitative study. *Health Res Policy Syst*. 2013;11:46.
16. Chalmers JM, King PL, Spencer AJ, Wright FAC, Carter KD. The oral health assessment tool—validity and reliability. *Aust Dent J*. 2005;50:191-199.
17. Australian Dental Association Inc. *The Australian Schedule of Dental Services and Glossary*. St Leonards, NSW: ADA Inc Tenth Edition; 2013.
18. NSW Health. *Information Bulletin: Oral Health Fee for Service Schedule of Fees for 2014*. Centre for Oral Health Strategy: File No. 07/6749-2, December 2013.
19. Lewis A, Wallace J, Deutsch A, King P. Improving the oral health of frail and functionally dependent elderly. *Aust Dent J*. 2015;60(1 Suppl):95-105.

20. Bartold PM. Nursing home care—we only have ourselves to blame. Editorial. *Aust Dent J*. 2011;56:1.
21. Siegel E, Cations M, Wright C, et al. Interventions to improve the oral heath of people with dementia or cognitive impairment. *J Nutr Health Aging*. 2016;. https://doi.org/10.1007/s12603-016-0851-6, November 26.
22. Wright FAC, List PF. Reforming the mission of public dental services. *Community Dent Oral Epidemiol*. 2012;40(Suppl 2):102-109.
23. Skinner JC, List P, Wright C. Utilisation of the Medicare Teen Dental Plan in NSW, 2008-2010. *NSW Public Health Bulletin*. 2012;23:5-11.
24. Lundqvist M, Davidson T, Ordell S, Sjöström O, Zimmerman M, Sjögren P. Health economic analyses of domiciliary dental care and care at fixed clinics for elderly nursing home residents in Sweden. *Community Dent Health*. 2015;32:39-43.
25. MacEntee MI, Kazanjian A, Kozak J-F, Hornby K, Thorne S, Kettratad-Pruksapong M. A scoping review and research synthesis on financing and regulating oral care in long-term facilities. *Gerodontology*. 2012;29:e41-e52.

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