

Results of 2004 New Hampshire Nursing Home Oral Health Survey

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I. Introduction

The Omnibus Reconciliation Act of 1987 made access to dental services a requirement for all nursing homes receiving Federal monies, however, "access" was only minimally defined and sadly, "the importance of oral health in the elderly is often misunderstood and neglected"¹. According to national data, dental care has been found to be among the least used health care services in nursing homes, with only 17 percent of residents receiving dental care, on average, compared to the percentage of residents receiving other services such as medical (88%), nutritional (69%), social (64%), or physical therapy (25%).²

Greater levels of cognitive deficits, functional dependence, physical frailty and the complexity of medical problems can complicate the provision of daily oral care and lead to an increase in oral diseases. A recent study by Cohen-Mansfield and Lipson reported that geriatricians identified half as many residents with dental pain as did dental professionals, leading them to conclude that, "dental (pain and) problems are under-detected and under-treated in the nursing home".³ Recent research has also found close associations between oral disease and systemic diseases pointing to a greater need to understand the provision of oral health care in nursing homes. To date there has been no clear documentation of existing oral health status of New Hampshire's long term care residents and their access to dental services.

In order to better understand New Hampshire nursing home residents' access to dental services, the Endowment for Health provided a grant to develop and administer a survey of state nursing homes. The purpose of the nursing home oral health survey was to gather information from nursing home administrators about dental services provided to nursing home residents in New Hampshire and how these needs may be better met in the future.

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II. Survey Methodology

- Two over-arching questions guided the design of this survey:
 - What is the extent and nature of dental services provided in nursing homes in New Hampshire?
 - What challenges do nursing home administrators face in providing oral health services to their residents?

¹ Lin CY, Jones DB, Goodwin K, et al. Oral assessment by nursing staff of Alzheimer's' patients in a long-term care facility. *Spec Care Dentist* 1999; 19:64-71.

² Shuman, SK, GJ Pronych, JC Ofstehage. 2000. Chapter on *Dental Services* in Long-Term Care Survey and Certification Guide. Eli Research, Inc., Chapel Hill, NC. pp. 1401-32.

³ Cohen-Mansfield, Lipson S. The underdetection of pain of dental etiology in persons with dementia. *Am J Alzheimer's Dis Other Demen* 2002; 17:249-53.

- In order to gather these data, a three-page written survey with both open- and closed-ended questions was developed. This survey was adapted from a survey developed by Jane M. Chalmers, Ph.D., Associate Professor at the University of Iowa College of Dentistry (*The Adelaide Dental Survey of Nursing Homes*, 1999). The survey was pre-tested by three nursing home administrators and also reviewed by four dental professionals and refined based on their feedback. In order to facilitate analysis, respondents were requested to provide the name of their facility.
- The survey was mailed to each nursing home administrator in New Hampshire. One mail follow-up was conducted to encourage administrators who had not responded to the original mailing to complete and mail in the survey. In addition, a drawing was held to encourage survey completion and one facility was selected to receive a \$200 contribution toward their Resident Fund.
- Of the 86 administrators who received the survey, 53 or 62% returned the survey.
- Responses to all surveys were input into an SPSS database and analyzed. Analysis was run using SPSS Version 10.1.
- Analysis was conducted for all survey responses received. In addition, comparisons of responses by geographic location of facilities and by size of facility were conducted; however, no notable differences based on these characteristics were evident.

III. SURVEY RESULTS

THE PROVISION OF ORAL HEALTH SERVICES IN NURSING HOMES IN NEW HAMPSHIRE

A large portion of the survey asked administrators to provide their perspectives on the extent and nature of oral health services provided in their nursing homes. The following section summarizes these results.

- Nearly all nursing home administrators responding to the survey indicated that they felt they were able to obtain the dental services needed for their residents. Ninety-four percent of respondents said they were able to obtain the services they needed for residents with some natural teeth remaining and 98% indicated they were able to obtain needed services for residents with no natural teeth remaining.
- According to administrators responding to the survey, nearly all (91%) stated they had at least some dental services provided in the nursing home during the past 12 months. The following identifies the percent of administrators who report that these services were provided in the nursing home during the past 12 months:
 - screenings/annual exams: 96%
 - preventive care: 83%
 - referrals to specialists/outside dentists: 69%
 - filling cavities: 65%
 - staff education: 54%
 - input to residents' care plans: 44%
 - 24-hour on-call emergency/crisis care: 44%

- other: 4%⁴

Almost all survey respondents (94%) reported that services were provided to all residents who need them. Among the few respondents who noted that services were not available to all residents, respondents reported that this reflected the particular needs of the resident, for example, residents who needed more extensive dental work, residents enrolled with a provider and residents who were on blood thinners.

- Fifty-nine percent of survey respondents reported that residents had some or all of their dental services provided at a private dental practice during the past 12 months. Four percent stated that residents had some or all of their dental services provided elsewhere during the past 12 months.⁵
- Ninety-four percent (of 46)⁶ nursing home administrators responding to the survey indicated that portable equipment is used to provide dental services in their nursing homes.
- Responses to the survey indicate that in most of these nursing homes, dental services have been provided for some time. The table below presents data on the number of years dental services have been provided at 45 nursing homes, as reported by administrators:

Table 1: Number of years dental services have been provided at nursing homes

Years	% (Number) of Respondents
1.5	2% (1)
5	16% (7)
6	2% (1)
8	9% (4)
10	22% (10)
12	9% (4)
14	4% (2)
15	2% (1)
20	2% (1)
Many	2% (1)
Don't Know	29% (13)

Of the nursing home administrators who knew how long services were provided in their nursing home, all except one administrator reported that dental services had been provided for more 5 years or more; about 56% reported dental services have been provided at their nursing homes for 10 years or more.

⁴ Types of "other" services identified by administrators were: denture alignment and denture fittings; making dentures, full and partial, and teeth extraction; denture repair.

⁵ "Other" locations included hospitals and NHH.

⁶ Because not every administrator who completed the survey responded to each question, the number of total respondents from which the percentage is taken differs by question. The total number (N) from which the percentage is taken is noted where appropriate.

- According to survey respondents, dentists rather than dental hygienists provide most of the professional dental services in their nursing homes. All survey respondents that provided dental services in the nursing home over the past 12 months (N=47) reported that a dentist came to the nursing home. By contrast, only 43% of these nursing home administrators (N=35) reported that a dental hygienist came to their nursing home during the past 12 months. Nearly all nursing homes that had only 1 dentist and/or hygienist provide dental services over the past 12 months, according to survey respondents.
- The time dentists spent per month in nursing homes varies from 2 to 40 hours, according to survey respondents, with an average of 8 hours per month (N=46). The table below presents information on the hours dentists spent on average per month in nursing homes in the past 12 months, according to administrators responding to the survey.

Table 2: Hours dentists spent per month in nursing homes

# of Hours	% (Number) of Respondents
2	2% (1)
3	9% (4)
4	28% (13)
5	11% (5)
6	9% (4)
7	2% (1)
8	15% (7)
10	9% (4)
16	7% (3)
20	4% (2)
24	2% (1)
40	2% (1)

- The time hygienists spent per month in nursing homes varies from 1 to 24 hours, according to survey respondents, with an average of 8.4 hours per month (N=14). The table below presents information on the hours hygienists spent on average per month in nursing homes in the past 12 months, according to administrators responding to the survey.

Table 3: Hours hygienists spent per month in nursing homes

# of Hours	% (Number) of Respondents ⁷
1	7% (1)
3	7% (1)
4	29% (4)
6	21% (3)
8	7% (1)
12	7% (1)

⁷ Because of the small number of respondents, percentages should be interpreted with caution.

# of Hours	% (Number) of Respondents ⁷
16	7% (1)
20	7% (1)
24	7% (1)

- According to administrators responding to the survey, a line item in the nursing home budget is the most common way to cover the costs of providing dental services to nursing home residents (N=53). Sixty-six percent of administrators reported that they had a line item in their budgets to cover some or all of dental services costs for residents. Forty-seven percent reported using Medicaid and 43% reported self-pay as mechanisms to help fund their dental services. Twenty-three percent of administrators reported that private insurance funds some of their dental services. Two percent of administrators reported that some costs are covered through volunteer services of the dentist/hygienist.
- Administrators were also asked several more specific questions related to the provision of dental services in their nursing homes. Table 4 summarizes these results.

Table 4: Survey respondents' opinions about dental services in nursing homes

The extent to which administrators agreed that:	Strongly Agree	Agree	No Opinion/ Don't Know	Disagree	Strongly Disagree
Nursing home residents with teeth should have their teeth cleaned at least twice a year [N=52]	50%	44%	2%	4%	
Nursing home residents who wear dentures need to have an oral exam by a dentist at least once a year [N=52]	60%	40%			
Staff can always find dentists to treat Medicaid patients when needed [N=47]	26%	23%	6%	32%	13%
Toothbrushing is a part of daily hygiene for all residents [N=52]	54%	39%	2%	6%	
Nurses are held responsible for maintaining residents' daily oral hygiene [N=52]	39%	54%	2%	6%	
Each resident's ability to brush his/her teeth is evaluated regularly [N=52]	12%	56%	12%	21%	
If a resident cannot brush his/her own teeth, daily oral health care is provided [N=53]	46%	52%	2%		
Most residents have routine dental care by a dentist [N=51]	31%	57%	2%	6%	4%
In-service training for nursing includes instruction in oral health care by a dentist or hygienist [N=51]	22%	51%	6%	18%	4%

- Administrators report a generally positive perspective on the daily oral hygiene of residents. Ninety-three percent report that they "agree" or "strongly agree" that toothbrushing is a part of daily hygiene for their residents and 98% report that if a resident cannot brush his/her own teeth, daily oral health care is provided. Most administrators report that nurses are held responsible for residents' daily oral hygiene

(93%). Twenty-two percent of administrators “disagree” or “strongly disagree” that in-service training for nursing includes instruction in oral health care by a dentist or hygienist.

- Open-ended comments by administrators reveal overall satisfaction with the dental service and dental care providers they are currently working with. Comments also indicate difficulty in trying to find dentists to come into nursing homes. For example:
 - I believe our residents get adequate dental care. We have contracted dentist who has a sincere interest in providing quality care to our residents. I believe that is the most important factor in determining outcomes.
 - We are fortunate that dental care is a line item in our nursing home budget and all residents receive the dental care they need. Dentures however have been a problem and a financial concern at times.
 - When a resident requires dental surgery or extractions, few oral surgeons are willing to accept our residents for required services.
 - We are very fortunate to have a dentist come in monthly with equipment to treat all residents.
 - We would love to have a dentist and/or hygienist come to our home routinely - unable to find willing dentist or hygienist.
 - We have had the same dentist here for many years. I have been unable to find other dentists willing to come in, no one wants to come to nursing home. I feel dentists could do more work for the elderly. More prevention.

CHALLENGES TO PROVIDING DENTAL SERVICES TO NURSING HOME RESIDENTS IN NEW HAMPSHIRE

- Administrators were asked to identify to what extent they faced certain problems in providing services to their residents. Table 5 summarizes these results.

Table 5: Survey respondents’ opinions about problems in providing dental services in nursing homes

	Always a problem	Frequently a problem	Sometimes a problem	Seldom a problem	Never a problem
Financial constraints of residents [N=52]		10%	37%	25%	29%
Disinterest of dentists/hygienists in nursing home dentistry [N=53]	6%	13%	19%	19%	43%
Nursing home staffing and time constraints [N=53]		6%	38%	25%	32%
Preference of dentists to treat residents at their dental practice [N=53]	9%	9%	30%	17%	34%
Obtaining consent for residents’ dental care [N=52]		2%	8%	54%	37%
Time needed to provide dental treatment at nursing homes [N=52]	2%	6%	19%	46%	27%
Behavioral problems of residents [N=53]		15%	62%	19%	4%
Limited knowledge about how to provide dental care by nursing home staff [N=53]		4%	32%	47%	17%

	Always a problem	Frequently a problem	Sometimes a problem	Seldom a problem	Never a problem
Transportation of residents to a dental practice [N=51]	6%	12%	23%	26%	35%
Insufficient portable dental equipment for use in nursing homes [N=50]	6%	14%	22%	26%	32%
Lower priority given to oral health by nursing home staff [N=53]	2%	2%	30%	42%	25%
Cognitive status of residents [N=53]		17%	76%	6%	2%
No suitable area available for dental treatment at nursing homes [N=53]	4%	6%	30%	23%	38%
Families' lack of understanding about residents' dental care [N=52]		6%	29%	36%	27%
Nursing home staff reluctance to provide regular oral hygiene for residents [N=53]		4%	23%	43%	30%
Medical or physical problems of residents [N=53]		8%	79%	13%	
Insufficient training for dentists in geriatric dentistry [N=50]	2%	14%	14%	38%	32%
Low financial reimbursement for dentists who provide dental treatment in nursing homes [N=49]	18%	22%	18%	16%	25%
Disinterest of residents about their dental health [N=53]		15%	45%	26%	13%
Low financial reimbursement for nursing homes to provide dental services [N=50]	32%	6%	22%	20%	20%

- Among the problems administrators cited in providing dental care to their residents, the largest number reported that low financial reimbursement for dentists (40%) and low financial reimbursement for nursing homes to provide dental care (38%) are “frequently” or “always” a problem for them. Issues that were cited by administrators as “sometimes” or “frequently” a problem were issues related to the behavior (67%), cognitive status (93%), and medical/physical problems (87%) of residents.
- Administrators were also asked to identify their three most frequent problems, among the problems cited above. Table 6 presents the results for the administrators responding to this question [N=47]:

Table 6: Survey respondents' top three problems in providing dental services in nursing homes

	% (Number) of respondents who indicated this to be one of top 3 problems
Financial constraints of residents	17% (8)
Disinterest of dentists/hygienists in nursing home dentistry	19% (9)
Nursing home staffing and time constraints	11% (5)
Preference of dentists to treat residents at their dental practice	19% (9)
Obtaining consent for residents' dental care	2% (1)

	% (Number) of respondents who indicated this to be one of top 3 problems
Time needed to provide dental treatment at nursing homes	2% (1)
Behavioral problems of residents	28% (13)
Limited knowledge about how to provide dental care by nursing home staff	0
Transportation of residents to a dental practice	11% (5)
Insufficient portable dental equipment for use in nursing homes	9% (4)
Lower priority given to oral health by nursing home staff	9% (4)
Cognitive status of residents	28% (13)
No suitable area available for dental treatment at nursing homes	13% (6)
Families' lack of understanding about residents' dental care	2% (1)
Nursing home staff reluctance to provide regular oral hygiene for residents	6% (3)
Medical or physical problems of residents	19% (9)
Insufficient training for dentists in geriatric dentistry	4% (2)
Low financial reimbursement for dentists who provide dental treatment in nursing homes	34% (16)
Disinterest of residents about their dental health	15% (7)
Low financial reimbursement for nursing homes to provide dental services	40% (19)

- According to administrators responding to the survey, low financial reimbursement for nursing homes to provide dental services (40%); low financial reimbursement for dentists who provide dental treatment in nursing homes (34%); cognitive status of residents (28%) and behavioral problems of residents (28%) are the top problems they face in trying to provide dental services to their residents.
- Open-ended comments by administrators point in particular to the difficulties raised by inadequate reimbursement by Medicaid. For example:
 - Medicaid/Medicare reimburses for one tooth extraction - no more unless full mouth extraction done in hospital. Residents do not have money to pay for additional work.
 - Residents on blood thinners have to be sent out of the facility. Sending them out disrupts their life, is costly and the provider won't see them w/out payment up front. Our facility is contracted for dental care.
 - If I lose my dentist who provides services in house, I am in deep trouble. Cost of oral surgery is astronomical and although covered by Medicaid the reimbursement is so low the oral surgeon's will not participate. Facility then is responsible.
 - Medicaid program has changed view of nursing homes financial responsibility. It used to be facility was responsible for covering "routine preventative care." Now I am paying dentists for performing oral surgery in acute setting because state dentist says it is facility's responsibility.
 - When a resident requires dental surgery or extractions, few oral surgeons are willing to accept our residents for required services. At times (we) have had to pay thousands of dollars for a resident's dental

- needs without any mechanism in place for reimbursement.
- Medicaid is terribly inadequate in this area- what a black mark on our social services system
- Can't find dentists to do "non-routine" dental work for medical reimbursement levels.

IV. CONCLUSIONS AND RECOMMENDATIONS

- Survey results indicate that, in general, administrators are able to obtain dental services needed for their residents and for most administrators, in the nursing homes themselves. The services most commonly provided in nursing homes are screenings and exams and preventive care. Fewer nursing homes provide on-site dental services such as filling cavities or 24-hour emergency/crisis care. Services are most often provided by dentists and much less frequently by hygienists, as reported by administrators.
- Responses to other questions in the survey and open-ended comments by survey respondents reveal, however, a situation that is potentially quite precarious. Nearly all nursing home administrators report being served by 1 dentist and/or 1 hygienist. In addition, open-ended comments reveal that finding dentists to provide services to nursing home residents is extremely difficult.
- In part, finding dentists to serve nursing home residents may point to a larger systemic issue, also raised by the survey results: the level of funding. Forty percent of administrators identified low financial reimbursement for dentists as “frequently” or “always” a problem for them. Thirty-eight percent of administrators cited low financial reimbursement to nursing homes to provide dental care “frequently” or “always” a problem for them. These two issues were cited by administrators as two of their top 3 problems.
- These survey results suggest that addressing the reimbursement issues would be an important step to ensuring quality dental services for nursing home residents.
- While this survey indicates that most administrators feel they have access to all the services they need, clinical data relating to levels of oral health status of residents was not collected. Pearson and Chalmers 2004 ⁸ noted that, “Recent oral epidemiological research findings have validated previous research findings and clinical observations of poor oral hygiene, higher dental caries experience and more dental problems in older adults with dementia.”
- Further research should be undertaken to identify and improve upon oral health disparities among New Hampshire’s elderly residing in long-term care facilities.

⁵Pearson A, Chalmers J. Oral hygiene care for adults with dementia in residential aged care facilities. *JBIR Reports* 2004; 2: 65-113.