APPENDIX A:

***CRISIS IN ACCESS TO DENTAL CARE* BY TOM BORNSTEIN**

Crisis in Access to Dental Care

Access to dental services for Alaska Natives, which historically has been limited, has now reached crisis proportions. In almost all Alaska Native Dental programs, the available care is tightly rationed. The problem continues to worsen each year.

Most programs have unreasonably long waiting times for appointments, up to a year for many services. Some programs have stopped making new patient appointments altogether as they are barely keeping up with basic preventive care for children and treatment already in progress for adults.

Patients with toothaches, living in villages, sometimes suffer for months while waiting for the next itinerant dental visit. In some cases, these patients spend hundreds of dollars traveling to an already overcrowded dental clinic hundreds of miles away.

Children with rampant dental decay often go untreated because of lack of access to dental care. It is not uncommon to see children with 12 out of their 20 baby teeth severely decayed. The rate of decay rate among children in Alaska is 2-1/2 times the national rate.

The increasing population of Alaska Natives with Diabetes often don't receive treatment of periodontal problems associated with their disease. Diabetic patients with broken or ill fitting dentures find it difficult to obtain repair of dentures so they can maintain an adequate diet. If services considered "higher level" care (such as dentures) are available at all, the patient must pay a portion of the cost.

Rates of oral cancer among Alaska Natives are higher than in any other IHS area. Oral cancers are often detectable through routine oral exam and biopsy. These cancers generally appear in adults, the segment of the Alaska Native population with the least access to dental care.

There are a variety of reasons for this crisis in access to dental services. These include:

- ❑ Increased need for dental disease prevention

- ❑ Increased treatment needs due to the increasing number of high maintenance teeth in adults
- ❑ Escalating costs and complexities of providing dental care
- ❑ Difficulties in the recruitment of professional staff
- ❑ Inadequate funding of dental programs for Alaska Natives
- ❑ Change in eating habits of Alaska Natives – from a traditional diet to a diet high in simple sugars
- ❑ The increase in Native population – a 60% increase since 1970

Changing Needs of Alaska Native Dental Patients

Over the past twenty years, the IHS and Tribal Dental Programs in Alaska have helped to elevate the oral health of the Alaska Native population. Even though the diet of Alaska Natives have been changing from a reliance on subsistence foods toward a grocery store diet of simple sugars, heavy in Tang and soda pop, there have been improvements in oral health. These improvements can be largely attributed to an increased availability of children's dental prevention services such as sealants. These services have resulted in a decrease in extensively decayed teeth, and subsequent retention of natural teeth among adults. The infrastructure to provide care for these adult teeth simply does not exist.

Twenty years ago, it was common to see Alaska Native patients in their thirties and forties who had already lost all of their teeth. Once these patients either got dentures (or got used to not having teeth), they seldom used dental services. It is now unusual to see patients in their forties with no remaining teeth. According to data from the 1991 *IHS Oral Health Survey*, the rate of tooth extractions in IHS areas nationwide has declined by half.

Along with the need for restoration of teeth is the increased need for endodontics (root canal therapy), periodontal (gum) treatment, and prosthodontics (crowns, bridges, and partial dentures). Adult patients now require a much higher degree of maintenance than when IHS dental programs were initially funded.

In addition to an increased focus on preventive care and growing treatment needs, the population of Alaska Natives has grown significantly since the initial IHS allocations for dental care, far outpacing the U.S. population. In 1970 there were 50,605 Native people in the state. By 1980 the population had increased to 64,103, a 27% increase. By 1990 there was a 34% increase to 86,252. Now there are an estimated 105,644 Alaska Natives, more than twice the population that the IHS dental programs of the 1970's were based upon.

Change in the Delivery of Dental Care

Over the past two decades, the way in which dental care is provided has changed. During this time period, dental programs in Alaska have shifted from Indian Health Service to Tribal Health Organization management.

The tribal programs inherited many benefits from the Indian Health Service system: the use of Commissioned Corps dentists providing a cost-effective, skilled, and motivated labor force; federal service Expanded-Function Dental Assistants who increased the efficiency and productivity of the Dental Programs; dental assistants trained through Indian Health Service training programs; and a model for providing public health dentistry which espoused utilization of resources to provide the most good for the greatest number of patients.

But with these benefits came many challenges: the demand for care far outstripped program capabilities. Funding levels did not match the escalating costs of complying with new rules and regulations promulgated by agencies such as OSHA, EPA or accrediting bodies such as JCAHO.

Most Tribal Health Programs initially contracted with IHS under the *Indian Self Determination Act*. This act gave tribes the right to collect revenues from 3rd party payers (Insurance, Medicaid). However, the model the Tribal Dental Programs inherited had no provisions for billing. Tribes lacked appropriate billing systems and billing personnel. The dental data system and IHS dental

coding (which the IHS asked the tribes to use) was almost impossible to mold into an efficient billing tool.

Village Programs

Tribal management has led to a keener interest in providing more dental services to patients in villages. The expansion of village services has resulted in higher program costs and a huge unmet need for dental services. Currently almost every dentist working in tribal programs travels extensively to provide care in remote villages. Each team member can expect to travel in the villages one to four months per year. This usually means travel by small plane, working with portable equipment that can be as much as twenty years old and sleeping on clinic floors or spare rooms. Even though village care has greatly expanded, there is grossly inadequate dental care available in most village communities. To expand village services will require increased funding for travel by small plane and portable equipment sufficient to carry out the required services.

Dentists

The dental care crisis is compounded by a decade-old problem of recruitment and retention of dentists in Alaska. Almost every dental program in the state continually has unfilled dentist vacancies. Most of the dentist positions are filled with commissioned officers of the U.S. Public Service serving on a memorandum of agreement between the tribal organization and the government. Funding of these positions was based on the Commissioned Corps salary for dentists. In some cases, tribal programs hired non-federal dentists because Commissioned Corps dentists were not available or "direct hire" dentists better suited the tribal organizations personnel system. The non-federal dentists must obtain an Alaska dental license. This can be a costly and time-consuming process. The salary for a "direct hire" dentist can be forty thousand dollars more than a Commissioned Officer with similar experience. This cost differential is borne by the tribal organization. The Commissioned Corps has recognized the difficulty in recruitment and retention and has recently instituted bonuses for dentists. While the bonuses are sorely needed for recruitment and retention, the federal government has not appropriated money to cover this

expense. Fixed cost increases such as these have greatly eroded tribal programs budgetary power.

Hygienists

At the time most tribal organizations assumed management of the IHS dental programs there were no dental hygienists working in the program. Currently almost all dental programs employ at least one dental hygienist and consider them an indispensable part of the dental team. Much of the leadership for dental prevention initiatives came from the hygienists. These dental hygienist positions were not part of the original funding package and have been supported solely by the tribal organizations.

Expanded Function Dental Assistants (EFDA)

Under IHS management, many programs had federally-employed Expanded-Function Dental Assistants (EFDA). They were trained and certified by the Indian Health Service to place fillings in teeth and perform other expanded duties. Expanded Function Dental Assistants greatly enhanced the dental programs productivity and patients access to routine treatment. As federal employees, the EFDA's activities were regulated by the federal government. Dental programs using experienced EFDA's could double the number of routine patients a dentist could treat in a day. During the past ten years, the number of federal positions available for tribal programs has decreased. Many of the Expanded Function Dental Assistants converted to "direct hire" employees of the Tribal Health Organizations. These "direct hire" employees are now regulated by the State of Alaska. Since the *State Dental Practice Act* makes no provision for Expanded Function Dental Assistants, it is the opinion of the State that only federally employed EFDA's are allowed to perform expanded duties such as placing fillings. Very few federal EFDA's are still practicing. When they retire and dental programs are unable to replace them, the capacity of the programs decreases.

Dental Specialists

Access to dental specialists for Alaska Natives is extremely limited. The Indian Health Service model provided for all of Alaska, only one oral surgeon, one endodontist, and one pediatric dentist. Demand on their time is considerable. Historically, the dental specialists have provided statewide consultative and training services. These services are now extremely limited.

These specialists have never and do not now provide clinical services outside of Anchorage. Appointments with the specialists entail many months of waiting. Travel costs from many parts of the state can be thousands of dollars for a child and escort referred to the specialist. These costs must often be paid by the tribal health programs.

There are no IHS supported specialty services available from periodontists, prosthodontists, or orthodontists. The difficulty of recruiting dental specialists for even short-term assignments is compounded by State of Alaska licensure issues. As a result, there is very little dental specialist care available for Alaska Natives. If specialty care is available at all, tribal health programs must arrange and fund these services on their own.

Summary:

- ❑ The need and demand for dental care has surpassed the capacity of Alaska Native dental programs.
- ❑ Strong dental prevention programs are starting to have an effect, but dental programs cannot handle the glut of routine dental care this has created.
- ❑ Dental programs were not originally funded to cope with current demand, both in population increases, as well as service needs.
- ❑ The dental needs of village communities in Alaska were historically and are increasingly grossly underserved.
- ❑ Availability of Expanded Function Dental Assistants has decreased because of State

of Alaska law.

- ❑ For most Alaska Natives, there is no reasonable access to dental specialist care.
- ❑ Recruitment and retention of dentists is extremely difficult.
- ❑ Alaska Native dental patients have an increased need and demand for dental hygienist services.
- ❑ There is an increased need and demand for more complex services.
- ❑ The diet of Alaska Natives continues to include increasing amounts of simple sugars.

Suggestions:

1) Develop a system for training Community Dental Health Aide Practitioners to provide some types of dental services in villages.
2) Lobby the State of Alaska to allow tribal health organization dental programs to use Expanded Function Dental Assistants.
3) Lobby the State of Alaska to allow tribal health organizations to employ dentists, dental specialists, and dental hygienists who are fully licensed to practice in any state.
4) Fund more dental care provider positions.
5) Help federal government be more aware of the crisis in access to dental care for Alaska Natives. Lobby for funding from congress and the IHS.
6) Advocate for better access to dental specialists.
7) Train dental hygienists in expanded duties and techniques such as atraumatic restoration of teeth.
8) Encourage healthy lifestyles that include an emphasis on oral health and healthy eating habits, including advocating for a return to or maintenance of subsistence diets.

APPENDIX B:
PROJECT ADVISORY GROUPS

Alaska Tribal Coordinating Committee

Tom Bornstein
Mark Gorman
Rose Heyano Loera
Sue Hoeldt
Brian Hollander
Sandra Jones
Barbara Keena
Mark Kelso
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Dan Long
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Alaska Native Tribal Health Consortium Representatives

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National Advisory Committee

Caswell Evans (Chairman)
Myron Allukian Jr.
Ann Battrell
Robert Brandjord
George Brenneman
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APPENDIX C:
SATISFACTION AND PERCEIVED ORAL HEALTH STATUS SURVEYS

FORM 2: Dental Care Survey—Adults (≥18 years old)

Participant ID_____ Site ID ____ Interview Date __/__/__ Interviewer Initials_____

SURVEY INSTRUCTIONS

A DHAT Is a Dental Health Aide Therapist. In this clinic the DHAT is: _____
If you have **NOT** seen a DHAT in the past 12 months, skip to question #7.

Answer questions by checking the box to the left of your answer.

EXPERIENCES WITH YOUR DHAT

1. In the last 12 months, how many times did you go to be seen by DHAT?
□ 1
□ 2
□ 3
□ 4
□ 5 to 9
□ 10 or more

2. In the last 12 months, how often did your DHAT explain things in a way that was easy to understand?
□ Never
□ Sometimes
□ Usually
□ Always

3. In the last 12 months, how often did your DHAT listen carefully to you?
□ Never
□ Sometimes
□ Usually
□ Always

4. In the last 12 months, how often did your DHAT treat you with courtesy and respect?
□ Never
□ Sometimes
□ Usually
□ Always

5. In the last 12 months, how often did your DHAT spend enough time with you?
□ Never
□ Sometimes
□ Usually
□ Always

6. Using any number from 0 to 10, where 0 is the worst DHAT possible and 10 is the best DHAT possible, what number would you use to rate your DHAT?

□ 0 Worst DHAT possible
□ 1
□ 2
□ 3
□ 4
□ 5
□ 6
□ 7
□ 8
□ 9
□ 10 Best DHAT possible

YOUR DENTAL CARE IN THE LAST 12 MONTHS

So far, the questions on this survey have been about your DHAT. The next set of questions ask about any dental care you had in the last 12 months, including dental care with your DHAT or with someone else.

7. In the last 12 months, how often did the DHAT or other dental providers do everything they could to help you feel as comfortable as possible during your dental work?

□ Never
□ Sometimes
□ Usually
□ Always

8. In the last 12 months, how often did the DHAT or other dental providers explain what they were doing while treating you?

□ Never
□ Sometimes
□ Usually
□ Always

9. In the last 12 months, how often were your dental appointments as soon as you wanted?

□ Never
□ Sometimes
□ Usually
□ Always

10. If you needed to see a DHAT or other dental provider right away because of a dental emergency in
the last 12 months, did you get to see one as soon as you wanted?

□ I did not have a dental emergency in the last 12 months
□ Definitely yes
□ Somewhat yes
□ Somewhat no
□ Definitely no

11. In the last 12 months, how often did you have to spend more than 15 minutes in the waiting room before you saw someone for your appointment?

□ Never
□ Sometimes
□ Usually
□ Always

12. Using any number from 0 to 10, where 0 is the worst dental care possible and 10 is the best dental care possible, what number would you use to rate all of the dental care you personally received in the last 12 months?

□ 0 Worst dental care possible
□ 1
□ 2
□ 3
□ 4
□ 5
□ 6
□ 7
□ 8
□ 9
□ 10 Best dental care possible

13. Using any number from 0 to 10, where 0 is the worst dental care system possible and 10 is the best dental care system possible, what number would you use to rate your dental care system?

□ 0 Worst dental care system possible
□ 1
□ 2
□ 3
□ 4
□ 5
□ 6
□ 7
□ 8
□ 9
□ 10 Best dental care system possible

ABOUT YOU

The last three questions ask for some information about you

14. In general, how would you rate the overall condition of your teeth and gums?

□ Excellent
□ Very good
□ Good
□ Fair
□ Poor

15. What is your age?

□ 18 to 24
□ 25 to 34
□ 35 to 44
□ 45 to 54
□ 55 to 64
□ 65 to 74
□ 75 or older

16. Are you male or female?

□ Male
□ Female

FORM 4: Dental Care Survey--Persons < 18 Years Old

Participant ID ____ Interview Date __/__/__ Interviewer Initials_____

SURVEY INSTRUCTIONS

A DHAT Is a Dental Health Aide Therapist. In this clinic the DHAT is: _____
If your child has not been seen by a DHAT in the past 12 months, skip to question #7.

Answer questions by checking the box to the left of your answer.

EXPERIENCES WITH YOUR DHAT

1. In the last 12 months, how many times did your child go to be seen by DHAT?
□ 1
□ 2
□ 3
□ 4
□ 5 to 9
□ 10 or more

2. In the last 12 months, how often did your child's DHAT explain things in a way that was easy to understand?
□ Never
□ Sometimes
□ Usually
□ Always

3. In the last 12 months, how often did your child's DHAT listen carefully to you?
□ Never
□ Sometimes
□ Usually
□ Always

4. In the last 12 months, how often did your DHAT treat you and your child with courtesy and respect?
□ Never
□ Sometimes
□ Usually
□ Always

5. In the last 12 months, how often did your DHAT spend enough time with your child?
□ Never
□ Sometimes
□ Usually
□ Always

6. Using any number from 0 to 10, where 0 is the worst DHAT possible and 10 is the best DHAT possible, what number would you use to rate your child's DHAT?

□ 0 Worst DHAT possible
□ 1
□ 2
□ 3
□ 4
□ 5
□ 6
□ 7
□ 8
□ 9
□ 10 Best DHAT possible

YOUR CHILD'S DENTAL CARE IN THE LAST 12 MONTHS

So far, the questions on this survey have been about your child's DHAT. The next set of questions ask about any dental care your child had in the last 12 months, including dental care with your DHAT or with someone else.

7. In the last 12 months, how often did the DHAT or other dental providers do everything they could to help your child feel as comfortable as possible during his/her dental work?

□ Never
□ Sometimes
□ Usually
□ Always

8. In the last 12 months, how often did the DHAT or other dental providers explain what they were doing while treating your child?

□ Never
□ Sometimes
□ Usually
□ Always

9. In the last 12 months, how often were your child's dental appointments as soon as you wanted?

□ Never
□ Sometimes
□ Usually
□ Always

10. If your child needed to see a DHAT or other dental provider right away because of a dental emergency in
the last 12 months, did your child get to see one as soon as you wanted?

□ I did not have a dental emergency in the last 12 months
□ Definitely yes
□ Somewhat yes
□ Somewhat no
□ Definitely no

11. In the last 12 months, how often did you have to spend more than 15 minutes in the waiting room before your child saw someone for his/her appointment?

□ Never
□ Sometimes
□ Usually
□ Always

12. Using any number from 0 to 10, where 0 is the worst dental care possible and 10 is the best dental care possible, what number would you use to rate all of the dental care your child personally received in the last 12 months?

□ 0 Worst dental care possible
□ 1
□ 2
□ 3
□ 4
□ 5
□ 6
□ 7
□ 8
□ 9
□ 10 Best dental care possible

13. Using any number from 0 to 10, where 0 is the worst dental care system possible and 10 is the best dental care system possible, what number would you use to rate your child's dental care system?

□ 0 Worst dental care system possible
□ 1
□ 2
□ 3
□ 4
□ 5
□ 6
□ 7
□ 8
□ 9
□ 10 Best dental care system possible

ABOUT YOUR CHILD

The last three questions ask for some information about your child

13. In general, how would you rate the overall condition of your child's teeth and gums?

□ Excellent
□ Very good
□ Good
□ Fair
□ Poor

14. What is your child's age, in years?

□ 0 to 4
□ 5 to 9
□ 10 to 14
□ 15 to 17

15. Is your child a male or a female?

□ Male
□ Female

APPENDIX D:

ORAL HEALTH IMPACT PROFILE AND PARENTS PERCEPTIONS QUESTIONNAIRE

FORM 3: OHIP (ADULTS >18 yrs). Name_____ DOB__/___/_____

I would like you to think about the past 12 months. Because of problems with your teeth, dentures or mouth, how often in the past 12 months have you….

1. had trouble pronouncing words	☐0 Never or not applicable	☐1 Hardly ever	☐2 Occasionally	☐3 Fairly often	☐4 Very often	☐5 Don't know
2. felt your sense of taste has worsened	☐0 Never or not applicable	☐1 Hardly ever	☐2 Occasionally	☐3 Fairly often	☐4 Very often	☐5 Don't know
3. had painful aching in the mouth	☐0 Never or not applicable	☐1 Hardly ever	☐2 Occasionally	☐3 Fairly often	☐4 Very often	☐5 Don't know
4. found it uncomfortable to eat any foods	☐0 Never or not applicable	☐1 Hardly ever	☐2 Occasionally	☐3 Fairly often	☐4 Very often	☐5 Don't know
5. have been self-conscious	☐0 Never or not applicable	☐1 Hardly ever	☐2 Occasionally	☐3 Fairly often	☐4 Very often	☐5 Don't know
6. felt tense	☐0 Never or not applicable	☐1 Hardly ever	☐2 Occasionally	☐3 Fairly often	☐4 Very often	☐5 Don't know
7. had an unsatisfactory diet	☐0 Never or not applicable	☐1 Hardly ever	☐2 Occasionally	☐3 Fairly often	☐4 Very often	☐5 Don't know
8. had to interrupt meals	☐0 Never or not applicable	☐1 Hardly ever	☐2 Occasionally	☐3 Fairly often	☐4 Very often	☐5 Don't know
9. found it difficult to relax	☐0 Never or not applicable	☐1 Hardly ever	☐2 Occasionally	☐3 Fairly often	☐4 Very often	☐5 Don't know
10. have been a bit embarrassed	☐0 Never or not applicable	☐1 Hardly ever	☐2 Occasionally	☐3 Fairly often	☐4 Very often	☐5 Don't know
11. have been irritable with other people	☐0 Never or not applicable	☐1 Hardly ever	☐2 Occasionally	☐3 Fairly often	☐4 Very often	☐5 Don't know
12. had difficulty doing usual jobs	☐0 Never or not applicable	☐1 Hardly ever	☐2 Occasionally	☐3 Fairly often	☐4 Very often	☐5 Don't know
13. felt life in general was less satisfying	☐0 Never or not applicable	☐1 Hardly ever	☐2 Occasionally	☐3 Fairly often	☐4 Very often	☐5 Don't know
14. have been totally unable to function	☐0 Never or not applicable	☐1 Hardly ever	☐2 Occasionally	☐3 Fairly often	☐4 Very often	☐5 Don't know

Form 5 Parents Perceptions Questionnaire (PPQ)
Children 6-17 Years Old

The following questions ask about effects that a child's oral conditions may have on the child, parents and other family members. For each of the following questions please check the box for the response that best describes your experiences. If a question does not apply, please mark "Never".

1. During the last 3 months, how often has your child had pain in the teeth, mouth or jaws?	☐1 Never	☐2 Once or twice	☐3 Sometimes	☐4 Often	☐5 Every day or almost every day	☐6 Don't know
2. During the last 3 months, because of your child's teeth, mouth or jaws, how often have you or another family member……						
a. been upset?	☐1 Never	☐2 Once or twice	☐3 Sometimes	☐4 Often	☐5 Every day or almost every day	☐6 Don't know
b. had sleep disrupted?	☐1 Never	☐2 Once or twice	☐3 Sometimes	☐4 Often	☐5 Every day or almost every day	☐6 Don't know
c. felt guilty?	☐1 Never	☐2 Once or twice	☐3 Sometimes	☐4 Often	☐5 Every day or almost every day	☐6 Don't know
d. taken time off work (example: for an appointment) ?	☐1 Never	☐2 Once or twice	☐3 Sometimes	☐4 Often	☐5 Every day or almost every day	☐6 Don't know
e. had less time for yourself or the family?	☐1 Never	☐2 Once or twice	☐3 Sometimes	☐4 Often	☐5 Every day or almost every day	☐6 Don't know
f. worried that your child will have fewer opportunities (example: dating, getting a job)?	☐1 Never	☐2 Once or twice	☐3 Sometimes	☐4 Often	☐5 Every day or almost every day	☐6 Don't know
g. felt uncomfortable in public places (example: stores and restaurants) with your child?	☐1 Never	☐2 Once or twice	☐3 Sometimes	☐4 Often	☐5 Every day or almost every day	☐6 Don't know

CONTINUE ON BACK PAGE…

3. During the last 3 months, because of his or her teeth, mouth or jaws, how often has your child……..						
a. been jealous of your or others in the family?	☐1 Never	☐2 Once or twice	☐3 Sometimes	☐4 Often	☐5 Every day or almost every day	☐6 Don't know
b. blamed you or another person in the family?	☐1 Never	☐2 Once or twice	☐3 Sometimes	☐4 Often	☐5 Every day or almost every day	☐6 Don't know
c. argued with you or others in the family?	☐1 Never	☐2 Once or twice	☐3 Sometimes	☐4 Often	☐5 Every day or almost every day	☐6 Don't know
d. required more attention from you and or others in the family?	☐1 Never	☐2 Once or twice	☐3 Sometimes	☐4 Often	☐5 Every day or almost every day	☐6 Don't know

4. During the last 3 months, how often has the condition of your child's teeth, mouth or jaws……						
a. interfered with family activities at home?	☐1 Never	☐2 Once or twice	☐3 Sometimes	☐4 Often	☐5 Every day or almost every day	☐6 Don't know
b. caused disagreement or conflict in your family?	☐1 Never	☐2 Once or twice	☐3 Sometimes	☐4 Often	☐5 Every day or almost every day	☐6 Don't know
c. caused financial difficulties for your family?	☐1 Never	☐2 Once or twice	☐3 Sometimes	☐4 Often	☐5 Every day or almost every day	☐6 Don't know

APPENDIX E:
ORAL EXAMINATION INSTRUCTIONS

Oral Examination Instructions

1. Community Periodontal Index - (CPI)

The Community Periodontal Index will be assessed only in adults (20+ years old)

Indicators. Three indicators of periodontal status are used for this assessment:

1. gingival bleeding
2. calculus
3. periodontal pockets

A specially designed lightweight CPI probe with a 0.5-mm ball tip is used, with a black band from 3.5-mm to 5.5-mm.

Sextants. The mouth is divided into sextants defined by tooth numbers: 1-5, 6-11, 12-16, 17-221, 22-27, 28-32. A sextant should be examined only if there are two or more teeth present and not indicated for extraction.

Index teeth. For adults aged 20 years and over, the teeth to be examined are:

2-3	8	14-15
30-31	24	18-19

The two molars in each posterior sextant are paired for recording, and if one is missing, there is no replacement. If no index teeth or tooth is present in a sextant qualifying for examination, all the remaining teeth in that sextant are examined and the highest score is recorded as the score for the sextant. In this case, distal surfaces of third molars should not be scored.

For subjects under the age of 20 years, the index should not be recorded.

Sensing gingival pockets and calculus. An index tooth should be probed, using the probe as a "sensing" instrument to determine pocket depth and to detect subgingival calculus and bleeding response. The sensing force used should be no more than 20 grams. A practical test for establishing this force is to place the probe point under the thumb nail and press until blanching occurs. For sensing subgingival calculus, the lightest possible force that will allow movement of the probe ball tip along the tooth surface should be used.

When the probe is inserted, the ball tip should follow the anatomical configuration of the surface of the tooth root. If the patient feels pain during probing, this is an indicative of the use of too much force.

The probe tip should be inserted gently into the gingival sulcus or pocket and the total extent of the sulcus or pocket explored. For example, the probe is placed in the pocket at the disto-buccal surface of the second molar, as close as possible to the contact point with the third molar, keeping the probe parallel to the long axis of the tooth. The probe is

then moved gently, with short upward and downward movements, along the buccal sulcus or pocket to the mesial surface of the second molar, and from the disto-buccal surface of the first molar towards the contact area with the premolar. A similar procedure is carried out for the lingual surfaces, starting distolingually to the second molar.

Examination and recording. The index teeth (or all remaining teeth in a sextant where there are no index teeth) should be probed and the highest score recorded in the appropriate box. The codes are:

0	Healthy
1	Bleeding observed, directly or by using mouth mirror, after probing (all of black band is visible)
2	Calculus detected during probing (all of the black band is visible
3	Pocket 4 - 5 mm (gingival margin situated on black band)
4	Pocket 6 mm or more (black band not visible)
X	Excluded sextant (less than two teeth present)
9	Not recorded

excerpted and modified from "WHO. *Oral Health Surveys –Basic methods (4th Ed).* Geneva, 1997. accessed at: http://www.whocollab.od.mah.se/expl/methods.html

2. Dental Caries Examination

The examination for dental caries will be conducted in both children and adults.

The examination for dental caries should be conducted with a plane mouth mirror. The CPI probe may be used to displace plaque if necessary, to assess contour/texture.

Examiners should adopt a systematic approach to the assessment of dentition status and treatment needs. The examination should proceed in an orderly manner from one tooth or tooth space to the adjacent tooth or tooth space. A tooth should be considered present in the mouth when any part of it is visible. If a permanent and a primary tooth occupy the same tooth space, the status of the permanent tooth only should be recorded.

Dentition status
Both letters and numbers are used for recording dentition status. The same boxes are used for recording both primary teeth and their permanent successors. An entry must be made in every box pertaining to coronal and root status. For primary teeth, where the root status is not assessed, a code "9" (not recorded) should be entered in the box pertaining to root status.

Note: Considerable care should be taken to diagnose tooth-coloured fillings, which may be extremely difficult to detect.

Codes for the dentition status of primary and permanent teeth (crowns and roots) are given in the table:

Code			Condition/status
Primary teeth	Permanent teeth		
Crown	Crown	Root	
A	0	0	Sound
B	1	1	Decayed
C	2	2	Filled, with decay
D	3	3	Filled, no decay
E	5	-	Missing, any reason
F	6	-	Fissure sealant
G	7	7	Bridge abutment (crown) / implant (root)
-	8	8	Unerupted tooth (crown) / unexposed (root)
T	T	-	Trauma (fracture)
-	9	9	Can’t examine (either) / Not present (root)

The Criteria for diagnosis and coding (primary tooth codes within parentheses) are:

0 (A). Sound crown.

A crown is recorded as sound if it shows no evidence of treated or untreated clinical caries. The stages of caries that precede cavitation, as well as other conditions similar to the early stages of caries, are excluded because they cannot be reliably diagnosed. Thus, a crown with the following defects, in the absence of other positive criteria, should be coded as sound:

- white or chalky spots;
- discolored or rough spots that are not soft to touch with a metal CPI probe;
- stained pits or fissures in the enamel that do not have visual signs of undermined enamel, or softening of the floor or walls detectable with a CPI probe;
- dark, shiny, hard, pitted areas of enamel in a tooth showing signs of moderate to severe fluorosis.
- lesions that, on the basis of their distribution or history, or visual/tactile examination, appear to be due to abrasion.

Sound root.

A root is recorded as sound when it is exposed and shows no evidence of treated or untreated clinical caries. (Unexposed roots are coded 8.)

---

1 (B). Decayed crown.
Caries is recorded as present when a lesion in a pit or fissure, or on a smooth tooth surface, has an unmistakable cavity, undermined enamel, or a detectably softened floor or wall. A tooth with a temporary filling, or one which is sealed (code 6 (F)) but also decayed, should also be included in this category. In cases where the crown has been destroyed by caries and only the root is left, the caries is judged to have originated on the crown and therefore scored as crown caries only. The CPI probe should be used to confirm visual evidence of caries on the occlusal, buccal and lingual surfaces. Where any doubt exists, caries should not be recorded as present.

Decayed root.

Caries is recorded as present when a lesion feels soft or leathery to probing with the CPI probe. If the root caries is discrete from the crown and will require a separate treatment, it should be recorded as root caries. For single carious lesions affecting both the crown and the root, the likely site of origin of the lesion should be recorded as decayed. When it is not possible to judge the site of origin, both the crown and the root should be recorded as decayed.

---

2 (C). Filled crown, with decay.
A crown is considered filled, with decay, when it has one or more permanent restorations (including extra-coronal (cast) restorations) and one or more areas that are decayed. No distinction is made between primary and secondary caries (i.e., the same code applies whether or not the carious lesions are in physical association with the restoration(s)).

Filled root, with decay.

A root is considered filled, with decay, when it has one or more permanent restorations and one or more areas that are decayed. No distinction is made between primary and secondary caries.

In the case of fillings involving both the crown and the root, judgment of the site of origin is more difficult. For any restoration most likely site of the primary carious lesion is recorded as filled, with decay. When it is not possible to judge the site of origin of the primary carious lesion, both the crown and the root should be recorded as filled, with decay.

3 (D). Filled crown, with no decay.
A crown is considered filled, without decay, when one or more permanent restorations are present and there is no caries anywhere on the crown. A tooth with an extra-coronal restoration (crown) is recorded in this category.

Filled root, with no decay.

A root is considered filled, without decay, when one or more permanent restorations are present and there is no caries anywhere on the root.

In the case of fillings involving both the crown and the root, judgment of the site of origin is more difficult. For any restoration involving both the crown and the root, the most likely site of the primary carious lesion is recorded as filled. When it is not possible to judge the site of origin, both the crown and the root should be recorded as filled.

5 (E). Tooth missing, for any reason.
This code is used for permanent teeth judged to be absent congenitally, or extracted for any reason. Pontics and implant supported superstructures receive this score

Note: The root status of a permanent tooth scored 5 will be coded “9" (not present) unless an implant is present.

6 (F). Fissure sealant.
This code is used for teeth in which a fissure sealant has been placed on the occlusal surface; or for teeth in which the occlusal fissure has been enlarged with a rounded or "flame-shaped" bur, and a composite material placed. If a tooth with a sealant has decay, it should be coded as 1 or B.

7 (G). Bridge abutment.
This code is used under coronal status to indicate that a tooth forms part of a fixed bridge, i.e., is a bridge abutment.

Note: A tooth with an abutment crown and decay should be scored as “2”

Note: Missing teeth replaced by a bridge are coded “5”, under coronal status, while root status is scored 9.

Implant. This code is used under root status to indicate that an implant has been placed as an abutment. The corresponding coronal score will be “5.”

8 (-). Unerupted crown.

This classification is restricted to permanent teeth and used only for a tooth space with an unerupted permanent tooth but without a primary tooth. Teeth scored as unerupted are excluded from all calculations concerning dental caries. This category does not include congenitally missing teeth, or teeth lost as a result of trauma, etc.

Unexposed root.

This code indicates that the root surface is not exposed, i.e. there is no gingival recession beyond the CEJ.

T (T). Trauma (fracture).
A crown is scored as fractured when some of its surface is missing as a result of trauma and there is no evidence of caries.

9 (-). Can't examine / Not present.
This code is used for any erupted permanent tooth that cannot be examined for any reason (e.g. because of orthodontic bands, severe hypoplasia, etc.).

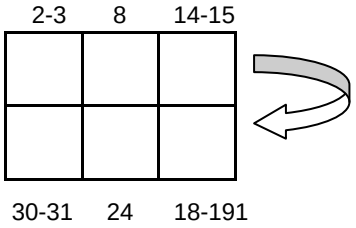
This code is used under root status to indicate either that the tooth has been extracted or that calculus is present to such an extent that a root examination is not possible.

excerpted and modified from "WHO. *Oral Health Surveys –Basic methods (4th Ed).* Geneva, 1997." accessed at:
http://www.whocollab.od.mah.se/expl/methods.html

Form 1: Oral Examination Recording Form

Site ID: __/__ Subject Birthdate: __/__/__ Exam Date: __/__/__ Examiner Initials:_____

1. Community Periodontal Index (adult subjects only 20+)



0 = healthy
1 = bleeding, all of black band exposed
2 = calculus, all of black band exposed
3 = 4-5mm, gingival margin on black band
4 = 6+mm, black band completely invisible
X = excluded (less than 2 teeth in sextant)
9 = not recorded

2. Dental Caries

Maxillary Arch

	Right								Left							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
				A	B	C	D	E	F	G	H	I	J			
crown																
root																

Mandibular Arch

	Right								Left							
	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
				T	S	R	Q	P	O	N	M	L	K			
crown																
root																

roots not scored if subject is less than 20 years old

Primary Crown	Permanent Crown	Permanent Root	
A	0	0	Sound
B	1	1	Decayed
C	2	2	Filled, with decay
D	3	3	Filled, no decay
E	5	-	Extracted, any reason
F	6	-	Fissure sealant
G	7	7	Bridge abutment (crown) / Implant (root)
-	8	8	Unerupted tooth (crown) / Unexposed (root)
T	T	-	Trauma / fracture
-	9	9	Can't examine (either) / Not present (root)

APPENDIX F:
SEALANT EVALUATION RECORDING FORM

Form 13: Sealant Evaluation Recording Form

Participant ID _____ **Date of Birth** ___/___/____

Date of evaluation: ___ / ___ / ___ **Evaluator's Initials:** _____

Tooth Number: ____ **Tooth Surfaces (circle)**: O B L

****

1. **Maintenance of Dry Field**

___ isolation
(no rubber dam, cotton roll, or equivalent isolation employed)

___ drying
(occlusal surface not thoroughly dried after etch and rinse)

2. **Application**

___ surface preparation
(no acid etch, or insufficient etching time)

___ polymerization
(insufficient time, or light tip too far from occlusal surface)

3. **Evaluation**

___ occlusion
(*occlusion not checked)*

___ retentiveness
(retentiveness not checked with explorer)

Instructions: *The evaluator will observe the placement of the sealant without interfering with the procedure. Obvious departures from recommended technique (described in parentheses) will be noted.*

APPENDIX G:
COMPOSITE EVALUATION RECORDING FORMS

Form 9: Composite Preparation (Cl III, IV) Evaluation Recording Form

Participant ID _____ **Date of birth:** ___/___/_____

Date of evaluation: ___ / ___ / ___ **Evaluator's Initials:** _____

Tooth Number: ___ **Tooth Surfaces (circle)**: M I D F L

****

1. External Outline Form

___ outline extension
(wall opposite access extends > 2.5 m beyond contact or under extended making it impossible to place/finish material or incisal cavosurface margin so that the incisal angle is fractured/missing or access grossly overextended)

___ gingival contact broken
(contact not visually broken or clearance > 2mm)

___ cavosurface margin
(does not terminate on sound tooth structure or unsupported enamel which would make restoration unserviceable or severely irregular bevel or bevel > 1.5 m or decalcification remains)

2. Internal Form

___ axial/pulpal depth
(more than 2.5 mm inside DEJ or completely in enamel)

___ proximal wall orientation
(walls diverge and offer no retention)

___ retention
(*inadequate to retain a restoration or deeper than 2.5 mm into dentin)*

___ caries removal
(infected caries remaining)

___ existing material removal
(material remaining)

3. Tissue/ Patient Management

___ adjacent teeth
(gross damage to adjacent teeth)

___ soft tissue
(iatrogenic damage to soft tissue)

___ pulp
(mechanical exposure or inadequate protection)

___ adequate anesthesia
(patient in obvious discomfort)

___ wrong tooth treated

4. Other: _____

Instructions: *The evaluator will clinically and radiographically examine the tooth before the procedure and note any unusual circumstances that may influence the preparation/restoration. Each aspect of the preparation will be examined for critical errors noted in parentheses. All observed critical errors will be noted on the form by the evaluator.*

Form 10: Composite Restoration (Cl III/IV) Evaluation Recording Form

Participant ID _____ **Site**_____

Date of evaluation: ___ **/** ___ **/** ___ **Evaluator's Initials:** _____

Tooth Number: ____ **Tooth Surfaces (circle)**: M I D F L **Placement Date** ____/___/___

****

1. **Margin Integrity & Surface Finish**

___ margin integrity
(evidence of > 1 mm excess/deficiency of material at the margin or pits/voids at the margin or overhanging material at the gingival margin or open margin)

___ surface finish
(pits or voids rendering restoration unservicable)

___ shade selection
(shade is esthetically unacceptable requiring replacement)

2. **Contact, Contour & Occlusion**

___ interproximal contact
(visually open or will not permit waxed floss to pass thru or size/location of contact is inadequate)

___ centric/excursive contacts
(gross hyperocculsion so that restoration is the only point of contact in that quadrant)

___ anatomy and contour
(*gross under or over contour)*

3. **Tissue/ Patient Management**

___ adjacent teeth
(gross damage to adjacent or opposing teeth)

___ soft tissue
(iatrogenic damage to soft tissue)

4. **Other**_____
(e.g. fractured/debonded restoration requiring replacement or damage to the treated tooth that requires further restoration)

Instructions: *The evaluator will clinically examine the restoration and adjacent teeth and note any unusual circumstances that may have influenced the preparation/restoration design. Each aspect of the restoration will be examined for critical errors noted in parentheses and any observed critical errors will be noted on the form*.

APPENDIX H:
AMALGAM EVALUATION RECORDING FORMS

Form 7: Amalgam Preparation Evaluation Recording Form

Participant ID _____ **Date of Birth** ___/___/____

Date of evaluation: ___ / ___ / ___ **Evaluator's Initials:** _____

Tooth Number: ___ **Tooth Surfaces (circle)**: M O D F L

****

1. External Outline Form

___ proximal extension
(no clearance or clearance > 2.5 mm)

___ occlusal outline extension
(isthmus > ½ intercuspal distance, defective grooves/caries remaining, existing restorative material remains, undermined marginal ridge)

___ cavosurface margin
(unsupported enamel which would make restoration unserviceable or does not provide for an adequate dimension of restorative material)

2. Internal Form

___ pulpal depth
(more than 2.5 mm inside DEJ or completely in enamel)

___ axial wall depth
(more than 2.5 mm inside DEJ or completely in enamel)

___ proximal wall orientation
(walls diverge and offer no retention)

___ retention
(*inadequate to retain a restoration or deeper than 2.5 mm into dentin)*

___ caries removal
(infected caries remaining)

___ existing material removal
(material remaining)

3. Tissue/ Patient Management

___ adjacent teeth
(gross damage to adjacent teeth)

___ soft tissue
(iatrogenic damage to soft tissue)

___ pulp
(mechanical exposure or inadequate protection)

___ adequate anesthesia
(patient in obvious discomfort)

___ wrong tooth treated

-over-

4. Other: _____

Instructions: *The evaluator will clinically and radiographically examine the tooth before the procedure and note any unusual circumstances that may influence the preparation/restoration. Each aspect of the preparation will be examined for critical errors noted in parentheses. All observed critical errors will be noted on the form by the evaluator.*

Form 8: Amalgam Restoration Evaluation Recording Form

Participant ID _____ **Site**_____

Date of evaluation: ___ / ___ / ___ **Evaluator's Initials:** _____

Tooth Number: ____ **Tooth Surfaces (circle)**: M O D F L **Placement Date** ____/___/___

****

1. **Margin Integrity & Surface Finish**

___ margin integrity
(evidence of > 1 mm excess/deficiency of material at the margin or pits/voids at the margin or overhanging material at the gingival margin or open margin)

___ surface finish
(pits or voids rendering restoration unservicable)

2. **Contact, Contour & Occlusion**

___ interproximal contact
(visually open or will not permit waxed floss to pass thru or size/location of contact will indequate)

___ centric/excursive contacts
(gross hyperocculsion so that restoration is the only point of contact)

___ anatomy and contour
(*gross under or over contour)*

3. **Tissue/ Patient Management**

___ adjacent teeth
(gross damage to adjacent teeth)

___ soft tissue
(iatrogenic damage to soft tissue)

4. **Fracture**

___ restoration is fractured
(restoration design (depth, width, etc) elevates risk of fracture)

5. **Other** _____

Instructions: *The evaluator will clinically examine the restoration and adjacent teeth and note any unusual circumstances that may have influenced the preparation/restoration design. Each aspect of the restoration will be examined for critical errors noted in parentheses and any observed critical errors will be noted on the form*.

APPENDIX I:
STAINLESS STEEL CROWN EVALUATION RECORDING FORMS

Form 11: Stainless Steel Crown Preparation Evaluation

Participant ID _____ **Date of Birth** ___/___/____

Date of evaluation: ___ / ___ / ___ **Evaluator's Initials:** _____

Tooth Number: ____

****

1. Tooth preparation

___ caries removal
(infected caries remaining)

___ pulp protection
(mechanical pulp exposure or inappropriate management of carious pulp exposure)

___ sufficient occlusal reduction
(less than 1mm reduction, insufficient to place SSC and obtained acceptable occlusion or excessive occlusal reduction greater than 2 mm)

___ mesial slice
(*greater than 2mm reduction or contact not broken, ledges present)*

___ distal slice
(*greater than 2mm reduction or contact not broken, ledges present)*

___ rounding of line angles
(*occlusal line angles not rounded, sharp angles present)*

___ facial and lingual reduction
(*usually not necessary)*

2. Tissue/ Patient Management

___ adjacent teeth
(gross damage to adjacent teeth)

___ soft tissue
(iatrogenic damage to soft tissue)

___ pulp
(mechanical exposure or inadequate protection)

___ adequate anesthesia
(patient in obvious discomfort)

___ behaviors management
(patient uncooperative and not able manage child in chair)

___ wrong tooth treated

3. Other_____

Instructions: *The evaluator will clinically examine the tooth before the procedure and note any unusual circumstances that may influence the preparation/restoration. Each aspect of the preparation will be examined for critical errors noted in parentheses. All observed critical errors will be noted on the form by the evaluator.*

Form 12: Stainless Steel Crown Restoration Evaluation

Participant ID _____ **Site**_____

Date of evaluation: ___ / ___ / ___ **Evaluator's Initials:** _____

Tooth Number: ____ **Placement Date** ___ / ___ / ___

****

1. SSC adaptation

___ occlusion

___ mesial marginal adaptation

___ distal marginal adaptation

___ facial marginal adaptation

___ lingual marginal adaptation

___ mesial contact

___ distal contact

2. SSC cementation

___ excess cement present

___ SSC unstable, movement present

___SSC missing

3. SSC Other _____

Instructions: *The evaluator will clinically examine the tooth before the restoration and note any unusual circumstances that may have influenced the preparation/restoration. Each listed aspect of the restoration will be examined. All observed critical errors will be noted on the form by the evaluator.*

APPENDIX J:
ORAL HYGIENE INSTRUCTION EVALUATION RECORDING FORM

Form 17: Oral Hygiene Instructions Evaluation

Participant ID _____ Site_____

Date of evaluation: ___ / ___ / ___ Evaluator's Initials: _____

Date of birth: ___ / ___ / ___

****

(answer all questions: if not observed, answer "no")

1. Demonstrated skill *(use of toothbrush, floss, etc)*

   yes □ **no** □

2. Supervised as patient demonstrated skill

   yes □ **no** □

3. Asked multiple questions (3+) about patient's oral hygiene behaviors

   yes □ **no** □

4. Engaged patient in discussion about oral hygiene *(as opposed to 'lecturing" patient)*

   yes □ **no** □

5. Praised the patient *(over some aspect of oral hygiene, or skill demonstration)*

   yes □ **no** □

6. Criticized the patient *(as opposed to non-pejorative feedback on oral hygiene status)*

   yes □ **no** □

7. Used threats of dire consequences of poor hygiene *(lose teeth, loose teeth , etc)*

   yes □ **no** □

APPENDIX K:
PERFORMANCE MEASURES DEFINITIONS AND AUDIT INSTRUCTIONS

Audit Instructions for Performance Measures

1. Selection process:

a. estimate the total number of records. If possible, make the estimate conservative
b. at random, inspect 20 charts to determine how many meet the selection criteria (see below).
c. multiply the estimated number of records by the percentage that meet selection criteria.
d. divide the estimated number of eligible records by 100. The quotient is the *index number.*
e. begin the audit at the nth record, where n = index number, and inspect every nth record for eligibility.
g. if the quota of 66 child and 34 adult records is not reached with one pass through the records, continue with second pass starting with the nth-1 record.

2. Selection Criteria:

a. record reflects at least one visit in each of the *recording year* (RY) and the *previous year* (PY), where:
   recording year (RY) = the 365 day period preceding the day of the audit.
   previous year (PY) = the 365 day period preceding the recording year.
b. record is of patient at least 6 years old at the time of the audit.

3. Recording Sheet:

Charts audits are guided by a *performance measures audit recording sheet* (attached), which lists the information to be collected or the question to be answered for each of the assessments conducted for each chart. For each chart, complete the recording sheet in the order listed. When the recording sheet is completed, it should be reviewed to ensure that no assessments have been skipped. If a print-out of claims (procedures codes) for individual patients is available, it may be used to speed the search for specific items in the chart. Do not respond to a question on the recording sheet based only on information from the print-out, confirm that the information is or is not in the chart.

Detailed instructions and definitions for each assessment item are presented on the following pages. The instructions include relevant ADA procedure codes, which are keyed to definitions in the 1994 edition of *Current Dental Technology (CDT-2).* These instructions are summarized on the chart audit recording sheet.

If possible, charts should be audited as a group, after selection is complete. If this preferred procedure is difficult to follow due to facility constraints, attempt to select and then audit charts in smaller groups, rather than individually.

For each chart, an ID number is noted as the first step in completing the chart audit recording sheet. The site ID number consists of a two digit site identification number followed by a three digit audit sequence number. The site identifier will be the same for all charts audited at the site.

Dental Care Performance Assessments -- Audit Items

Assessment 1: Total Visits

Purpose: indicate the number of visits occurring during RY

Response: count

Application: all records with any visit in RY

Definition: visit---any notation in the record indicating that the patient appeared at the treatment facility. Each visit should have a different date.

Codes: none

Assessment 2: Examination

Purpose: indicate the number of examinations performed during RY

Response: count

Application: all records with a visit in RY

Definition: examination---an initial or periodic (recall) examination. This category does not include emergency exams, consultations, office visits, or triage exams.

Codes: included
- D0150 comprehensive oral examination
- D0120 periodic examination

excluded
- D0140 limited (emergency) oral examination
- D9310 consultation
- D9430-09440 office visit
- D9999 unspecified (triage)

Assessment 3: Prophylaxis

Purpose: indicate the number of prophylaxes provided in RY

Response: count

Application: all records with a visit in RY

Definition: prophylaxis---a cleaning that may include scaling, but does not involve periodontal services such as root planing or curettage.

Codes: included
-D1110 prophylaxis, adult
-D1120 prophylaxis, child
-D1201 topical application of fluoride (including prophylaxis), child
-D1205 topical application of fluoride (including prophylaxis), adult
excluded
- D4220 gingival curettage
- D4341 periodontal scaling and root planing
- D4355 full mouth debridement
- D4910 periodontal maintenance procedures

Assessment 4: Fluoride Treatment

Purpose: indicate the number of fluoride treatments provided in RY

Response: count

Application: all records with a visit in RY

Definition: fluoride treatment---application of fluoride as a rinse, gel, or varnish.

Codes: - D1201-D1205 topical application of fluoride

Assessment 5: Receipt of Sealants

Purpose: determine whether any tooth was sealed in RY

Response: yes/no

Application: all records with a visit in RY

Definition: sealant---application of a plastic resin to the occlusal, facial, or lingual surface of a posterior tooth or the lingual surface of an incisor.

Code: - D1351 dental sealant

Assessment 6: Oral Hygiene Instruction

Purpose: determine if any oral hygiene instruction was provided in RY

Response: yes/no

Application: all records with a visit in RY

Definition: oral hygiene instruction—a formal effort to improve a patient's oral hygiene through instruction.

Codes: included
- D1330 oral hygiene instructions.

Note: may not be coded. Accept any notation in the chart using the term, the abbreviation, or similar terminology such as "brushing instructions"

Assessment 7: Oral Cancer Examination

Purpose: determine if an oral cancer examination was performed in RY

Response: yes/no

Application: all records with a visit in RY

Definition: oral cancer examination—an inspection of the intraoral soft tissues. Includes displacement of the toungue.

Codes: none

Note: No associated code. Accept any notation indicating that an intraoral oral cancer examination was performed

Assessment 8: Treatment/Referral for Periodontal Disease

Purpose: indicate whether any periodontal therapy was provided in RY, or if patient is receiving periodontal care elsewhere

Response: yes/no

Application: all records with a visit in RY

Definition: periodontal treatment---treatment procedures for periodontal disease or evidence of receipt of periodontal treatment elsewhere following referral

Codes: included
- D4220 gingival curettage
- D4341 periodontal scaling and root planing
- D4910 periodontal maintenance
- D4210-D4211 gingivectomy
- D4240-D4250 other gingival surgery
- D4260-D4268 osseous surgery and bone grafts
- 04270-04271 soft tissue grafts

excluded
prophylaxis D1110, D1120, D1201, D1205

Note: Referral for periodontal treatment need not be initiated in the RY, but evidence of a visit to a periodontist in the RY is necessary. Any notation concerning ongoing or initial periodontal treatment or shared/rotating recalls with a periodontist is sufficient.

Assessment 9: Number of Direct Restorations

Purpose: determine total number of direct restorations (amalgams and composites) provided in RY

Response: count

Application: all records with a visit in RY

Definition: direct restorations---all amalgam and composite restorations. This category does not include temporary restorations or veneers, but does include restorations following endodontic treatment, restorations placed as buildups (foundations), and resin and stainless steel crowns placed as permanent restorations

Codes: included
- D2110-D2161 amalgam restorations
- D2210-D2387 composite restorations
- D2410-D2430 gold foil restorations
- D2931-D2933 prefabricated resin and SSC crowns
- D2950 core buildup

excluded
- D2970 temporary crown
- D2960-D2962 veneers
- D2940 sedative filling

Assessment 10: Previous Year Direct Restorations

Purpose: determine total number of direct restorations (amalgams and composites) provided in PY

Response: count

Application: all records with a visit in RY

Definition: direct restorations---see Assessment 7

Note: This assessment is identical to Assessment 9, but for the previous recording year (PY).

Assessment 11: Number of Extractions

Purpose: determine number of eligible teeth extracted in RY

Response: count

Application: all records with a visit in RY

Definition: extraction---removal of a permanent tooth, not including third molars (1, 16, 17, 32) or first premolars extracted for orthodontic reasons (5, 12, 22, 28).

Codes: included
- D7110-D7120 extraction
- D7210-D7141 surgical extraction

excluded
- D7130, D7250 root removal

Notes: An extraction performed elsewhere by referral is counted if it can be verified by a chart entry noting the extraction was performed, of dental charting indicating the tooth is missing, or by radiograph.

Any first premolar extraction in subjects age 8-11 inclusive is assumed to be for orthodontic reasons. Other ages require confirmation in the record.

Assessment 12: Number of Third Molar Extractions

Purpose: determine total number of third molars extracted in RY

Response: count

Application: records of patients 16 to 24 years of age (inclusive) during any part of RY with a visit

Definition: third molar extraction---removal of a third molar. See Assessment 10.

Note: Extractions performed elsewhere should be counted if procedures can be verified by chart entry or radiograph

Assessment 13: Diet/Nutritional Counseling

Purpose:	determine if any counseling regarding diet occurred during the RY or PY
Response:	yes/no
Application:	all records, regardless of visit status
Definition:	diet/nutritional counseling---formal counseling on food selection and dietary habits as a part of treatment/control of caries
Code:	- D1310 nutritional counseling
Notes:	Accept any note indicating a formal discussion dietary habits

Assessment 14: Caries Susceptibility Testing

Purpose:	determine if a caries susceptibility test was performed in the RY or PY
Response:	yes/no
Application:	all records, regardless of visit status
Definition:	caries susceptibility test-–-bacteriological test performed on saliva
Code:	- D0425 caries susceptibility test

Assessment 15: Caries Risk/Activity Notation

Purpose: determine if any notation concerning patient-level caries risk or caries activity, or caries risk indicators was placed in the record in the RY or PY, and level of that risk

Response: *yes*-elevated risk/yes-low risk/no

Application: all records, regardless of visit status

Definition: caries risk/activity notation---any notation indicating that the risk of future caries or the current level of caries experienced by the patient had been specifically considered by the provider. This consideration might be denoted by a notation about "caries risk," or "caries activity," or a fluoride or chlorhexidine prescription, or notation of specific risk indicators, other information that, in the auditor's opinion, indicates that the patient's level of caries risk/activity had been considered by the provider. If Assessment 13 or 14 is positive (present), the criterion is satisfied. All notations or other indications that risk has been considered are considered to represent an indication that the patient has been assessed as being at elevated risk, unless specifically stated otherwise.

Codes:
- D1330 nutritional counseling
- D0425 caries susceptibility test

Note: Notations about carious status of individual teeth are not to be considered.

Assessment 16: Total Preventive Services

Purpose: determine total number of preventive services provided in RY

Response: count of services

Application: all records with a visit in RY

Definition: preventive services--any treatment intended to prevent caries or periodontal disease

Codes: included
- 01203, 01204 fluoride treatment
- 01110, 01120 prophylaxis
- 01201, 01205 prophylaxis and fluoride (counts as two services)
- 01310 diet counseling
- 01320 tobacco counseling
- 01351 dental sealant
- 00415 bacteriologic studies
- 00425 caries bacteriological testing
- 04910 perio maintenance
- 09630 fluoride prescription for home use

excluded
- 01510-01550 space maintenance
- 01330 oral hygiene instructions (TBI, OHI)
- all periodontal therapy procedures (except perio maintenance)

Assessment 17: Gingival Bleeding Notation

Purpose: determine if presence or location of gingival bleeding is noted in RY or PY

Response: yes/no

Application: all records, regardless of visit status

Definition: gingival bleeding notation-—-gingival bleeding location noted on tooth chart, or notation about frequency of, distribution of, or propensity for gingival bleeding noted in chart

Code: *none*

Assessment 18: Notation of Periodontal Disease Status

Purpose: determine whether periodontal disease status has been recorded or patient referred in the RY or PY

Response: *yes/no*

Application: all records regardless of visit status

Definition: notation of periodontal disease status---two specific notations are accepted as indicators that periodontal disease has been assessed.

1) either pocket depths are noted or PSR (Periodontal Screening Record) scores (six sextant scores) are noted
2) notation made that “no pockets are present,” or that “periodontal status is within normal limits (WNL)” or equivalent.

referral--any note in chart that patient has been referred to periodontist, or any indication that patient has received treatment from a periodontist

Note: The PSR is generally recorded in a 2X3 grid as shown below. Each of the six numerical scores can range from 0-4.Notation must occur during RY or PY

2	3	2
3	1	4

Assessment 19: Presence of Periodontal Disease

Purpose: determine whether notations indicate presence of periodontal disease

Response: yes/no

Application: all records with probing depth notations or PSR scores.

Definition: presence of periodontal disease---if any of the following conditions is true for notations made in the RY or PY, answer "yes":

1) a probing depth of 5mm or more is noted, or
2) one or more PSR sextant scores is 4, or
3) three or more PSR sextant scores are 3

Notes: If more than one notation in the RY or PY includes PSR scores, use most recent notation. Answer "no" if probing depths or PSR is not entered in the record during RY or PY

Assessment 20: Treatment Complications Following Most Recent Class II Restoration

Purpose: determine if any treatment complication occurred that was associated the insertion of the most recent Class II restoration during the RY

Response: yes (describe) /no/no eligible restoration

Application: all records

Definition: treatment complication---includes notation that patient sought treatment for, or otherwise reported a post-operative complication associated with insertion of a Class II amalgam or composite permanent restoration. Complications are evaluated only for the most recent Class II restoration placed. Complication might be pain. ache, bleeding, or restoration fracture or loss. If response is yes, auditor is directed to describe the complication. If no eligible restoration was inserted, respond "no eligible restoration."

Note: temporary restorations sedative fillings, and restorations associated with pulp capping or pulp treatment are not eligible restorations.

Assessment 21: Treatment Complications Following Most Recent Extraction

Purpose: determine if any treatment complication occurred that was associated the most recent primary or permanent tooth extraction that occurred during the RY

Response: yes (describe) /no/no eligible extraction

Application: all records

Definition: treatment complication---includes notation that patient sought treatment for, or otherwise reported a post-operative complication associated with extraction of *a primary or permanent tooth*. Complications are evaluated only for the most recent extraction. Complication might be pain, bleeding, infection, parathesia, or dry socket. If response is yes, auditor is directed to describe the complication. If no eligible extraction occurred, respond "no eligible extraction."

Assessment 22: Consultation with Dentist

Purpose: determine if any consultations occurred with either the hub dentist or any other dentist during the RY

Response: yes (describe issue) /no

Application: all records

Definition: consultation---any notation that indicates that advice or permission was sought from a supervising dentist or other dentist-expert about a treatment-related issue involving the patient.

description—If one or more consultations occurred, indicate the reason(s) for the consultation(s), i.e., the issues discussed. The issue might be a problematic diagnosis, a decision about what treatment to provide, or whether to initiate treatment or to refer, a medical management question, a question about whether the operator is legally allowed to provide a particular treatment (scope of practice), or other issue. If the type of issue underlying the consultation is not evident, indicate that it cannot be determined. Check all issues that were discussed in one or more consultations during the recording year.

--end--

ver 05/10/09

Performance Measures Audit Recording Sheet

Office ID: ___ / ___/___

Patient Birthdate: ___/___/___ **Audit Date: ___ / ___ / ___** **Auditor Initials: _____**

****

1. Total Visits

_____ TOTAL number of visits in RY (count) each visit should have different date

_____ DHAT Visits (included in total visits in RY)

_____ Ortho Visits (included in total visits in RY)

2. Examination

_____ TOTAL examination in RY (count) initial and recall exams only (D0120, D0150)

_____ DHAT Examination in RY (included in total visits in RY)

3. Prophylaxis

_____ prophylaxis in RY (count) prophy (D1110, D1120, D11201, D1205), but not periodontal treatment (D4000 series)

4. Fluoride Treatment

_____ fluoride in RY (count) topical application (D1201-D1205)

5. Dental Sealant

yes[1] no[2] sealant treatment(s) in RY dental sealant (D1351)

6. Oral Hygiene Instruction

yes[1] no[2] O.H.I. delivered in RY oral hygiene instruction (D1330)

7. Oral Cancer Examination

yes[1] no[2] cancer exam in RY no code, notation in progress notes

8. Periodontal Treatment or Referral

yes[1] no[2] any periodontal treatment or referral in RY D40000 series or evidence of treatment through referral

9. Direct Restorations

_____ direct restorations in RY (count) all amalgams and composites, includes foundations but not temporaries

10. Previous Year Direct Restorations

_____ direct restorations in PY (count) same as above, but for previous year PY

11. Extractions

_____ extractions in RY (count) permanent teeth only: do not include 3rd molars, or 1st premolars removed

for orthodontics. Include referrals, if extraction is verified

12. Third Molar Extractions

_____ third molar extractions in RY (count) include those referred, if they can be verified

13. Dietary/Nutritional Counseling

yes[1] no[2] diet counseling in PY or RY any notation about attention to diet(D1310)

14. Caries susceptibility Testing

yes[1] no[2] caries susceptibility test in PY or RY any notation about testing for caries susceptibility(D0425)

15. Caries Risk/Activity Notation

yes-elevated risk[1] yes-low risk[2] no[3] notation of information about "caries risk" in PY or RY

16: Total Preventive Services

_____ preventive services in RY (count) fluoride, fluoride prescription, prophy, diet counseling, caries testing, sealant
do not include tooth brushing and flossing instruction or perio maintenance

17: Gingival Bleeding Notation

yes[1] no[2] gingival bleeding notation any notation about gingival bleeding

18. Periodontal Status Notation either full charting or notes about all pockets over a specific mm measurement

yes[1] no[2] probing depths or PSR/CPITN noted, or
"no pockets"/"wnl" notation, or
indication of referral or treatment by periodontist

19. Periodontal Disease Present use most recent notation, if recorded within PY-RY period

yes[1] no[2] one or more probing depths is 5mm or more, or
one or more PSR/CPITN cells is 4, or
3 or more cells are at least 3

20. Treatment Complications Following Most Recent Class II Restoration in RY

yes[1] no[2] no eligible restoration[3] if yes, describe_____

21. Treatment Complications Following Most Recent Extraction in RY

yes[1] no[2] no eligible extraction[3] if yes, describe_____

22. Consultations

yes[1] no[2] one or more consultations with hub clinic or other dentist during the RY

If yes, indicate issue(s) addressed in the consultation(s) (check all raised during RY)

□ assistance with diagnosing a problem tic issue
□ assistance with managing the medical aspects of a patient's treatment
□ assistance with deciding on or implementing treatment
□ scope of practice issue
□ can't determine
□ other issue_____

Performance Measures — Specifications

Effectiveness of Care Measures

1a: Current Disease Status Assessment--Children

all charts with "yes" for Assessment #13, or #14, or #15, i.e., diet counseling, caries susceptibility test, or caries risk notation.

---

all audited child charts

1b: Current Disease Status Assessment--Adults

all charts with "yes" for Assessment #13, or #14 or #15, i.e., diet counseling, caries susceptibility test, or caries risk notation,
and
and "yes" for Assessment #18, i.e., PSR/probing depths noted, or "no pockets"/"wnl" notation, or referral/treatment by a periodontist

---

all audited adult charts

2a: Preventive Treatment for Caries-Active Children

all charts in the denominator with a "yes" response to Assessment #4 or Assessment #5

---

all audited child charts with "yes" for Assessment #13 or #14., or "yes-elevated risk" for Assessment #15,
or
with two or more current or previous restorations (total of Assessments #9, #10)

2b: Preventive Treatment for Caries-Active Adults

all charts in the denominator with a "yes" response to Assessment #4

---

all audited adult charts with "yes" for Assessment #13 or #14., or "yes-elevated risk" for Assessment #15,
or
with two or more current or previous restorations (total of Assessments #9, #10)

3: New Presumptive Caries

all charts where the sum of Assessment #9 and Assessment #10 is two or more

---

all audited charts (children and adults separately)

4: Periodontal Treatment for Perio-Present Adults

$$\frac{\text{all charts in denominator where Assessment \#3 (prophylaxis) is two or more, or where Assessment \#8 (treatment/referral for periodontal disease) is “yes,}}{\text{all audited adult charts with “yes” for Assessment \#18 or \#19.}}$$

5: Tooth Loss

$$\frac{\text{all charts in the denominator with a count of one or more in Assessment \#11}}{\text{all audited charts (children and adults separately)}}$$

Use of Services Measures

1: Receipt of Prophylaxes

$$\frac{\text{all charts in the denominator with a count of one or more for Assessment \#3}}{\text{all audited charts (children and adults separately)}}$$

2: Preventive Treatment : Restorative Treatment Ratio

$$\frac{\text{total count for Assessment \#16, preventive services, for all audited charts}}{\text{total count for Assessment \#9, direct restorations, for all audited charts}}$$

APPENDIX L:
EXAMPLES OF CRITERIA BY DIMENSIONS

Examples of Criteria by Dimensions

FACILITY

- Access for physically challenged
- Reception room size
- Business office size
- X-ray facilities and shielding
- Treatment room size and appearance
- Hygiene room appearance

EQUIPMENT

- Radiograph duplication
- Radiation protection equipment
- Portable oxygen and ventilation device
- Nitrous oxide with scavenger
- Medical emergency kit
- Automated external defibrillator (AED)
- Eye wash station
- Scrap amalgam storage
- Hazardous chemical labeling

PERSONNEL NUMBERS AND TRAINING

- Assistant number per doctor
- Hygienist number per clinic
- CPR-training
- Continuing education
- DHAT communication with doctor

WRITTEN DESCRIPTIONS OF ADMINISTRATIVE SYSTEMS FOR PATIENT CARE

- Recall
- Dental emergency coverage
- Medical emergency
- Physician and dental specialist referrals
- Medical alerts
- Radiographs taken after examinations
- Oral/Head/Neck cancer examination

PERSONNEL AND OSHA RELATED ELEMENTS OF INFECTION CONTROL PROGRAM

- Infection control training
- Policies for medical management of exposures
- Policies for immunizations
- Policies for post-exposure management
- Personnel risk categories
- System for maintaining personnel records
- Policy for minimizing radiation exposure

PATIENT MATERIALS

- Office policies
- Education materials

PRACTICE MANAGEMENT

- Appointment scheduling
- Medical emergency preparedness
- Daily staff meetings
- Formal staff meetings
- In-service materials

STERILIZATION AND INFECTION CONTROL

- Alcohol-based hand rub
- Hand hygiene
- Dental impressions
- Protocol for laboratory case disinfection
- Documentation of laboratory case disinfection
- Laboratory items (e.g., knives)
- Personal protective garments
- X-ray head
- X-ray switches and controls
- Light handles
- Chair switches and controls
- Work area surfaces
- Hand-pieces and air/water syringes
- Hoses and couplings
- Reusable containers of dental materials
- Barrier protection
- Personal protective equipment
- Patient eye protection
- Heavy utility gloves
- Forceps or wire disinfection baskets
- Sharps container
- Needle capping
- Sterilization processing area
- Instrument cleaning
- Chemical and biological (spore) indicators
- Sterilization record keeping
- Instrument preparation and packaging
- No food/drinks in work areas
- Sterile saline/water for surgeries

APPENDIX M:
KEY INFORMANT INTERVIEW GUIDES

STAKEHOLDER INTERVIEW
DHAT Supervising Dentist

INTERVIEWER:

RESPONDENT:

RESPONDENT CATEGORY**:**

DATE AND TIME OF INTERVIEW**:**

Overview

I'm _____ from RTI International. We're conducting an evaluation of the Dental Health Aide Therapist (DHAT) program. The evaluation is being conducted for the W.K. Kellogg Foundation, the Bethel Community Foundation, and the Rasmussen Foundation, in partnership with the Alaska Native Tribal Health Consortium. The purposes of the evaluation are to focus on access to care and dental quality along with the implementation of the Dental Therapist program to explore what is working well and areas that may need improvement to better serve the village.

We appreciate your willingness to speak with us today. Your answers will be kept confidential—when we report results, we will not provide your name. The interview should take 30–45 minutes and you may discontinue the interview at any point. Do you have any questions about the interview or the study itself?

NOTE ANY QUESTIONS ASKED ABOUT THE STUDY:

INFORMED CONSENT
Do you agree to take part in the interview? Is it ok with you for us to begin?
_____Verbal Consent provided

I would like to tape record the interview to help ensure accuracy of the interview notes. Once the notes have been compiled, we will destroy the tape. Is it ok with you for me to record the interview?
_____ Verbal Consent provided for use of tape recorder

Note to interviewers—fill in name or village name when [ ] in question.

Descriptive Information about Respondent

I'd like to begin by asking you a little about yourself.

1. What is your position in [healthcare corporation's name]?
2. How long have you been in this position?
3. How long have you been with [healthcare corporation]?
4. How long have you lived in Alaska?

Working with DHATs

Now, I would like to ask a few questions about your work with the DHATs.

1. Are you the supervisor for the DHATs? (Are they working under your license?)
    a. How long have you been in this role?
        i. If less than 6 months: Did you have a working relationship with the DHATs prior to becoming supervisor?
        ii. Who was the previous supervisor and why did a change occur?
2. What is your philosophy about the DHAT's role?
    a. How does your philosophy affect how you supervise [the DHAT]?
    b. Specifically, what procedures do you allow the DHATs to do?
    c. Do you restrict the DHATs in any way compared to what they are trained to do? (LIST THESE)
    d. Do you allow the DHATs to do anything outside the scope of their training? (LIST ACTIVITIES ALLOWED)
    e. Are there any differences in what you allow each of the DHATs to do? For example, do you allow some DHATs to do procedures that you don't allow others to do?
3. Roughly what percentage of time do you spend supervising [the DHAT]? What are the main activities you do in this supervising role?
    a. Are there regular calls?
        i. If so, how often?
    b. How does a DHAT know when to ask for assistance?
    c. Are records made of calls with [the DHAT]?
    d. How do you review [the DHAT's] quality of work?
    e. Are site visits made to the DHAT's clinic?
        i. If yes: How often do these occur?
            a. What happens in a typical site visit?
            b. How are visits documented?
            c. Are action items developed?
            d. Is a formal report prepared?
            e. Is there formal follow-up after a visit?
    f. Are specific steps taken to maintain the quality of the DHAT's work?
    g. Do you provide oversight for any of the following: (IF YES to any of the following, What is done?)

i. Sanitation procedures and overall sanitation of [the DHAT's] practice area?
ii. The quality of record keeping?
iii. Confidentiality procedures?
iv. Practice management (such as scheduling, supervision of dental assistant, call-back procedures, etc.)?

4. What have been the biggest challenges to supervising the DHATs in general?
5. What recommendations would you make overall for improving the supervision of DHATs?

Community Norms Related to Oral Hygiene and Diet

Let's shift for a few minutes away from the DHATs to focus on the villages in which they are practicing. I know there are differences across villages so let's focus on [village where focus DHAT practices].

1. How familiar are you with [village]?
   a. Have you ever provided dental care to people living there?
   b. [IF NO, don't need to ask questions about village.]
2. What is the typical diet for the children of the village?
   a. Is this different from the typical adult diet?
   b. We've seen posters encouraging villagers to eat more native foods. Do you think this is happening?
3. How would you describe village residents' attitudes toward eating foods and drinks that have a large amount of sugar?
4. Are you aware of any ways the DHAT has helped changed attitudes about eating a lot of sugary foods, such as cookies, candy, soda pop, or sugar Koolaid, in the past year for people in the village?
   a. If yes, how?

Now, let's talk about how people in the village take care of their teeth.

5. How would you describe the oral health habits of people in the village:
   a. Do you think adults in the village brush daily? Why do you think this?
   b. Do you think children in the village brush their teeth at home every day? Why do you think this?
   c. Have you noticed any changes in the ways that children's teeth are taken care of?
   d. Have you noticed any changes in the ways that adults' teeth are taken care of?
6. Have there been any changes happening in the villages that have DHATs that you think might help people have healthier teeth in [village]?
   a. Would you attribute any changes to the presence of a DHAT in the village?
7. What are your thoughts regarding water fluoridation for the village?
   a. How do you think the residents feel about this?
8. What are some of the challenges that may keep some people in the village from having healthy teeth?
   a. Overall, what is the biggest barrier to having healthy teeth for adults in [village]?
   b. What is the biggest barrier to having healthy teeth for children in [village]?

Access to Care

Now I would like to ask you some questions about access to dental care in the village.

1. Has the ability to get regular dental care changed for people in [village] since [the DHAT] started practicing in the village? IF YES: How?
    a. Can you give any specific examples of what has changed?

   IF NO: Why not?
    b. What do you think is the main reason the ability to get care has not changed since [the DHAT] started working in the village?
2. Have the changes in getting dental care since [the DHAT] started working here been what you expected?
    a. Why (or why not)?
3. Assuming there are roughly 20 work days in a month, approximately what percentage of time would you estimate that [the DHAT] was available to see patients in [village] in the past month?
    a. Was this a typical month?
4. In a typical day, approximately how many patients would you estimate [the DHAT] sees?
5. What kinds of steps are taken to encourage patients to come in for routine exams?
    a. Who is responsible for these?
6. Is there an established relationship with the schools to help get dental care for children?
    a. How would you describe the relationship between [the DHAT] and the school?
    b. When was this relationship established?
    c. Who maintains this relationship?
    d. What are examples of [the DHAT's] work in the schools?

Access to Emergency Care

1. Has the ability to get emergency dental care for people in the village changed as a result of [the DHAT's] practicing in the village?
    a. If yes: How?
    b. If no: Why not?
2. Are you aware of any examples in the last month in which [the DHAT] was able to provide emergency care for someone in the village?
    a. Are there other examples that come to mind?

PROBE IF NOT MENTIONED

3. What about care related to fixing urgent dental problems, such as cavities or the need to pull teeth?
    a. Can you think of examples in which [the DHAT] has done these in the past month?

Prevention Activities

1. Are you aware of any prevention activities, such as teaching children how to brush their teeth, instruction on diet, or other activities that have occurred in the village in the last year?
    a. Did [the DHAT] play a role in getting these started?
    b. Are the activities ongoing?
        i. Why (or why not)?

    Probes if not previously mentioned:

    c. Does [the DHAT] conduct any prevention activities with the schools?
    d. Does [the DHAT] conduct any prevention activities in addition to what is taking place in school?

Adverse Impacts and Unintended Consequences

1. What about any unexpected positive things that may have occurred for the village? Have there been any of these?
2. Are you aware of any problems from having the DHATs practicing in the village?
    a. Have there been any reports of complications or health-related issues?
        i. For any of the adults?
        ii. For any of the children?
    b. Do you have any concerns about what the DHATs are doing in terms of:
        i. Quality of care being offered?
        ii. Any other concerns?
    c. If yes, can you tell me more about these?
3. What about problems or unexpected things that have happened at the village level? Are you aware of any changes or outcomes for the village that have been problems?

Satisfaction with the DHAT

1. Were you part of the decision-making group that selected [the DHAT] for training?
    a. If yes, how was [the DHAT] selected?
    b. Were there any particular skills or characteristics you wanted to see?
    c. If you identify people in the future for DHAT training, what would you do differently?
2. Do you think the clinic staff is generally satisfied with [the DHAT's] performance?
    a. Why (or why not?)
3. Are you aware of any problems that have occurred with [the DHAT]? If yes, please describe these.
4. How has [the DHAT] been accepted by the people of the village?
5. Do you think village residents are generally satisfied with what [the DHAT] is accomplishing in the village?
    a. Why (or why not)?
6. How do you think the village residents perceive having a dental therapist, compared with a traditional dentist, such as some of the itinerant dentists who have provided care for the village?

Implementation

1. Have there been any [other] benefits to the clinic from having a DHAT practicing here? IF YES: What are the benefits?
2. Have there been any [other] disadvantages to having a DHAT? IF YES: What are the disadvantages?
   PROBES:
   a. IF YES TO 2: Of the disadvantages you mentioned, what would you consider to be the biggest disadvantage?

Sustainability

1. Have you had any problems in placing or retaining DHATs?
   a. Overall?
   b. For the smaller or more remote villages?
2. What are your expectations for the DHATs to continue in their roles after their "pay back period" is over?
   a. Why do you think this?
   b. Are there differences in your expectations for different DHATs?
3. Have you had problems in recruiting new individuals for DHAT training?

Summary of DHAT Supervision

1. In summary, what are the main benefits or advantages of having the DHAT?
   a. Which of these would you consider to be the most important?
2. What are the main problems or disadvantages of having a DHAT in the village?
   a. Which of these would you consider to be the most important?
3. What suggestions would you offer for improving the DHAT program? If you could send one message to those who have been funding the DHAT project, what would it be?

STAKEHOLDER INTERVIEW
DHAT Protocol

INTERVIEWER:

RESPONDENT:

RESPONDENT CATEGORY**:**

DATE AND TIME OF INTERVIEW**:**

Overview

I'm _____ from RTI International. We're conducting an evaluation of the Dental Health Aide Therapist (DHAT) program. The evaluation is being conducted for the W.K. Kellogg Foundation, the Bethel Community Foundation, and the Rasmussen Foundation, in partnership with the Alaska Native Tribal Health Consortium. These organizations are interested in the effects of the Dental Therapist program on access to care and dental quality which we will be evaluating. We also will be assessing the implementation of the Dental Therapist program to explore what is working well and areas that may need improvement to better serve the village.

We appreciate your willingness to speak with us today. Your answers will be kept confidential—when we report results, we will not provide your name. The interview should take 30–45 minutes and you may discontinue the interview at any point. Do you have any questions about the interview or the study itself?

NOTE ANY QUESTIONS ASKED ABOUT THE STUDY:

INFORMED CONSENT
Do you agree to take part in the interview? Is it ok with you for us to begin?
_____Verbal Consent provided

I would like to tape record the interview to help ensure accuracy of the interview notes. Once the notes have been compiled, we will destroy the tape. Is it ok with you for me to record the interview?
_____ Verbal Consent provided for use of tape recorder

Note to interviewers—fill in name or village name when [ ] in question.

Descriptive Information about Respondent

I'd like to begin by asking you a little about yourself.

1. How long have you been a Dental Health Aide Therapist for [healthcare corporation's name]?
2. How long have you lived in [village]?
3. How long have you lived in Alaska?
4. When did you complete your training as a DHAT?
5. What motivated you to become a DHAT?
6. Assuming a typical month has about 20 work days, how many days would you estimate you worked in [village] last month?
7. What other villages do you work in and how many days would you estimate you were working in these villages last month?
8. What or who determines your travel schedule to other villages?
9. What or who determines your typical work week schedule of seeing patients and your other duties?
10. Do you currently have a dental assistant?
    a. If yes, for how long?
    b. If no, why not?

Work as a DHAT

Now, I would like to ask a few questions about your work as a DHAT.

1. What is your philosophy about the role of a DHAT?
    a. How does your philosophy affect what you do?
    b. Specifically, what patient care procedures do you feel comfortable doing?
    c. Do you restrict what you do in any way compared to what you are trained to do? (LIST THESE)
    d. Do you do anything outside the scope of your training? (LIST EACH OF ACTIVITIES ALLOWED AND NOTE ACTIVITIES DHAT REPORTS)
2. Assuming there are about 40 hours in a typical work week, roughly how many hours did you spend in the past week communicating with your supervising dentist?
    a. Are there regular calls?
        i. If so, how often?
    b. How do you know when to ask for assistance?
    c. Are records made of calls between you and Dr. [supervising dentist]?
    d. How does Dr. [supervising dentist] review the quality of your work?
    e. Are site visits made to your clinic?
        i. If yes: How often do these occur?
            a. What happens in a typical site visit?
            b. How are they documented?
            c. Are action items developed?

d. Is a formal report prepared?
e. Is there formal follow-up after a visit?

f. Do you take any specific steps to maintain the quality of your work?
g. What are your practices on each of the following:
    i. Sanitation procedures and overall sanitation of the practice area?
    ii. The quality of record keeping?
    iii. Confidentiality procedures?
    iv. Practice management (such as scheduling, supervision of dental assistant, call-back procedures, etc.)?

3. What have been the biggest challenges to providing quality work in general?
4. What recommendations would you make overall for the overall quality of your work?

Community Norms Related to Oral Hygiene and Diet

Let's shift for a few minutes away from your work to focus on the villages in which you are practicing.

1. How familiar are you with the day-to-day behaviors of the people of the village?
2. What is the typical diet for the children of the village?
    a. Is this different from the typical adult diet?
    b. We've seen posters encouraging villagers to eat more native foods. Do you think this is happening?
3. How would you describe village residents' attitudes toward eating foods and drinks that have a large amount of sugar?
4. Have you helped changed attitudes about eating a lot of sugary foods, such as cookies, candy, soda pop, or sugar Koolaid, in the past year for people in the village?

Now, let's talk about how people in the village take care of their teeth.

1. How would you describe the oral health habits of people in the village:
    a. Do you think adults in the village brush daily? Why do you think this?
    b. Do you think children in the village brush their teeth at home every day? Why do you think this?
    c. Have you noticed any changes in the ways that children's teeth are taken care of?
    d. Have you noticed any changes in the ways that adults' teeth are taken care of?
2. Have there been any changes in the villages that you think might help people have healthier teeth in [village]?
    a. Would you attribute any changes to things you have done in the village?
3. What are your thoughts regarding water fluoridation for the village?
    a. How do you think the residents feel about this?
4. What are some of the challenges that may keep some people in the village from having healthy teeth?
    a. Overall, what is the biggest barrier to having healthy teeth for adults in [village]?
    b. What is the biggest barrier to having healthy teeth for children in [village]?

Access to Care

Now I would like to ask you some questions about access to dental care in the village.

1. Has the ability to get regular dental care changed for people in [village] since you started practicing in the village? IF YES: How?
    a. Can you give any specific examples of what has changed?

   IF NO: Why not?
    b. What do you think is the main reason the ability to get care has not changed since you started working in the village?
2. Have the changes in getting dental care since you started working here been what you expected?
    a. Why (or why not)?
3. Assuming that the typical month has about 20 work days, approximately what percentage of time would you estimate that you were available to see patients in [village] in the past month?
    a. Was this a typical month?
4. In a typical day, approximately how many patients would you estimate you see?
5. What kinds of steps are taken to encourage patients to come in for routine exams?
    a. Who is responsible for these?
6. Is there an established relationship with the schools to help get dental care for children?
    a. How would you describe the relationship between yourself and the school?
    b. When was this relationship established?
    c. Who maintains this relationship?
    d. What are examples of your work in the schools?

Access to Emergency Care

1. Has the ability to get emergency dental care for people in the village changed as a result of your practicing in the village?
    a. If yes: How?
    b. If no: Why not?
2. Are there any examples in the last month in which you provided emergency care for someone in the village?
    a. Are there other examples that come to mind?

PROBE IF NOT MENTIONED

3. What about care related to fixing urgent dental problems, such as cavities or the need to pull teeth?
    a. Can you think of examples in which you have done these in the past month?

Prevention Activities

1. Are you aware of any prevention activities, such as teaching children how to brush their teeth, instruction on diet, or other activities that have occurred in the village in the last year?

a. Did you play a role in getting these started?
b. Are the activities ongoing?
    i. Why (or why not)?

Probes if not previously mentioned:

c. Do you do any prevention activities with the schools?
d. Do you do any prevention activities in addition to what is taking place in school?

Adverse Impacts and Unintended Consequences

1. What about any unexpected positive things that may have occurred for the village? Have there been any of these?
    a. If yes, can you tell me more about these?
2. Have you encountered any problems practicing in the village?
    a. Have there been any reports of complications or health-related issues?
        i. For any of the adults?
        ii. For any of the children?
    b. Have people in the village expressed any concerns to you about what you are doing in terms of:
        i. Quality of care being offered?
        ii. Any other concerns?
3. What about problems or unexpected things that have happened at the village level? Are you aware of any changes or outcomes for the village that have been problems?

Satisfaction

1. How satisfied are you with your job as a DHAT? Please explain.
2. How satisfied are you with the training you received? Please explain.
    a. Were there any particular skills that you don't think you received enough training to do?
    b. If you identify people in the future for DHAT training, what would you do differently?
    c. Once your payback period is over, what do you plan to do?
3. How well do you feel the people of the village have accepted you?
4. Do you think village residents are generally satisfied with what you are accomplishing in the village?
    a. Why (or why not)?
5. How do you think the village residents perceive having a dental therapist, compared with a traditional dentist, such as some of the itinerant dentists who have provided care for the village?

Implementation

1. Have there been any [other] benefits to the village from having a DHAT practicing here? IF YES: What are the benefits?
2. Have there been any [other] disadvantages to having a DHAT? IF YES: What are the disadvantages?

PROBES:

a. IF YES TO 2: Of the disadvantages you mentioned, what would you consider to be the biggest disadvantage?

Summary

1. In summary, what are the main benefits or advantages of having a DHAT in the village?
   a. Which of these would you consider to be the most important?
2. What are the main problems or disadvantages of having a DHAT in the village?
   a. Which of these would you consider to be the most important?
3. What suggestions would you offer for improving the DHAT program? If you could send one message to those who have been funding the DHAT project, what would it be?

STAKEHOLDER INTERVIEW
Clinic Director for DHAT Home Village

INTERVIEWER:

RESPONDENT:

RESPONDENT CATEGORY**:**

DATE AND TIME OF INTERVIEW**:**

Overview

I'm _____ from RTI International. We're conducting an evaluation of the Dental Health Aide Therapist (DHAT) program. The evaluation is being conducted for the W.K. Kellogg Foundation, the Bethel Community Foundation, and the Rasmussen Foundation, in partnership with the Alaska Native Tribal Health Consortium. These organizations are interested in the effects of the Dental Therapist program on access to care and dental quality, which we will be evaluating. We also will be assessing the implementation of the Dental Therapist program to explore what is working well and areas that may need improvement to better serve the village.

We appreciate your willingness to speak with us today. Your answers will be kept confidential—when we report results, we will not provide your name. The interview should take 30–45 minutes and you may discontinue the interview at any point. Do you have any questions about the interview or the study itself?

NOTE ANY QUESTIONS ASKED ABOUT THE STUDY:

INFORMED CONSENT
Do you agree to take part in the interview? Is it ok with you for us to begin?
_____Verbal Consent provided

I would like to tape record the interview to help ensure accuracy of the interview notes. Once the notes have been compiled, we will destroy the tape. Is it ok with you for me to record the interview?
_____ Verbal Consent provided for use of tape recorder

Note to interviewers—fill in name or village name when [ ] in question.

Descriptive Information about Respondent

I'd like to begin by asking you a little about yourself.

1. How long have you been with the clinic?
2. How long have you been the clinic director?
3. What is your organizational relationship with [the DHAT]?
4. How long have you lived in [village]?

Community Norms Related to Oral Hygiene and Diet

Now I'd like to talk about the village norms related to oral hygiene and diet.

1. What is the typical diet for the children of the village?
    a. Is this different from the typical adult diet?
    b. We've seen posters encouraging villagers to eat more native foods. Do you think this is happening?
2. What do you see as the biggest barrier to having healthy teeth and gums as a result of the diet and nutritional practices of people here in the village?
3. How would you describe village residents' attitudes toward eating foods and drinks that have a large amount of sugar?
4. Have you seen any changes in attitudes about eating a lot of sugary foods in the past year for people in the village?
    a. If yes, how?
    b. What do you think has caused these changes?
5. How would you describe the dental habits of the residents of the village?
    a. Do you think adults in the village brush daily? Why do you think this?
    b. Do you think children in the village brush their teeth at home every day? Why do you think this?
6. What are your thoughts regarding water fluoridation for the village?
    a. How do you think the residents feel about this?
7. What is the biggest barrier to having healthy teeth for adults in [village]?
8. What is the biggest barrier to having healthy teeth for children in [village]?
9. Have there been any changes happening in the village that you think might help people have healthier teeth in [village]?

Access to Care

Now I would like to ask you some questions about getting dental care in the village.

1. Has the ability to get dental care changed since [the DHAT] started practicing in the village? IF YES: How?
    a. Can you give any specific examples of what has changed?

    IF NO: Why not?

    b. What do you think is the main reason people don't have an easier time getting dental care since [the DHAT] has started working in the village?
2. Have the changes in the ability of village residents to get dental care since [the DHAT] started working here been consistent with your expectations?
    a. Why (or why not)?
3. Assuming there are roughly 20 work days in a month, approximately what percentage of time would you estimate that [the DHAT] was available to see patients in [village] in the past month?
    a. Was this a typical month?
4. In a typical day, approximately how many patients would you estimate [the DHAT] sees?
5. What kinds of steps are taken to encourage patients to come in for routine exams?
    a. Who is responsible for these?
6. Is there an established relationship with the schools to help get dental care for children?
    a. How would you describe the relationship between [the DHAT] and the school?
    b. When was this relationship established?
    c. Who maintains this relationship?
    d. What are examples of [the DHAT's] work in the schools?

Access to Emergency Care

1. Has the ability to get emergency dental care for people in the village changed as a result of [the DHAT's] practicing in the village?
    a. If yes: How?
    b. If no: Why not?
2. Are you aware of any examples in the last month in which [the DHAT] was able to provide emergency care for someone in the village?
    a. Are there other examples that come to mind?

PROBE IF NOT MENTIONED

3. What about care related to fixing urgent dental problems, such as cavities or the need to pull teeth?
    a. Can you think of examples in which [the DHAT] has done these in the past month?

Prevention Activities

1. Are you aware of any prevention activities, such as educational efforts, brushing instruction, etc., that have occurred in the village?
    a. Did [the DHAT] play a role in getting these started?
    b. Are the activities ongoing?
        i. Why (or why not)?

    Probes if not previously mentioned:

    c. Does [the DHAT] conduct any prevention activities in conjunction with the schools?
    d. Does [the DHAT] conduct any prevention activities other than what is occurring in school?

Adverse Impacts and Unintended Consequences

1. Are you aware of any problems from having [the DHAT] practicing in the village?
    a. Have there been any reports of complications or health-related issues?
        i. For any of the adults?
        ii. For any of the children?
    b. Do you have any concerns about what [the DHAT] is doing in terms of:
        i. Quality of care being offered?
        ii. Sanitation of the working space?
        iii. Anything else?
2. What about any unexpected positive things that may have occurred for the village? Have there been any of these?
    a. If yes, can you tell me more about these?
3. What about problems or unexpected things that have happened at the village level? Are you aware of any changes or outcomes for the village that have been problems?

Satisfaction with the DHAT

1. Do you think the clinic staff is generally satisfied with [the DHAT's] performance?
    a. Why (or why not?)
2. Do you think tribal leadership is generally satisfied with [the DHAT's] performance?
    a. Why (or why not?)
3. Are you aware of any problems patients have had with [the DHAT]? If yes, please describe these.
4. How has [the DHAT] been accepted by the people of the village?
5. Do you think village residents are generally satisfied with what [the DHAT] is accomplishing in the village?
    a. Why (or why not)?
6. How do you think the village residents perceive having a dental therapist, compared with a traditional dentist, such as some of the itinerant dentists who have provided care for the village?

Implementation Issues

1. Have there been any [other] benefits to the clinic from having a DHAT practicing here?
   IF YES: What are the benefits?
2. Have there been any [other] disadvantages to having a DHAT practicing in the clinic?
   IF YES: What are the disadvantages?
   PROBES:
    a. Challenges stemming from [the DHAT's] work schedule?
    b. Acceptance by other staff?
    c. Numbers of people in clinic's waiting area?
    d. Excess noise?
    e. Loss of file or storage space?
3. IF YES TO 2: Of the disadvantages you mentioned, what would you consider to be the biggest disadvantage?

Summary

1. In summary, what are the main benefits or advantages of having the DHAT?
    a. Which of these would you consider to be the most important?
2. What are the main problems or disadvantages of having a DHAT in the village?
    a. Which of these would you consider to be the most important?
3. What suggestions would you offer for improving the DHAT program? If you could send one message to those who have been funding the DHAT project, what would it be?

STAKEHOLDER INTERVIEW
School Personnel

INTERVIEWER:

RESPONDENT:

RESPONDENT CATEGORY**:**

DATE AND TIME OF INTERVIEW**:**

Overview

I'm _____ from RTI International. We're conducting an evaluation of the Dental Health Aide Therapist (DHAT) program. The evaluation is being conducted for the W.K. Kellogg Foundation, the Bethel Community Foundation, and the Rasmussen Foundation, in partnership with the Alaska Native Tribal Health Consortium. These organizations are interested in the effects of the Dental Therapist program on access to care and dental quality which we will be evaluating. We also will be assessing the implementation of the Dental Therapist program to explore what is working well and areas that may need improvement to better serve the village.

We appreciate your willingness to speak with us today. Your answers will be kept confidential—when we report results, we will not provide your name. The interview should take 30–45 minutes and you may discontinue the interview at any point. Do you have any questions about the interview or the study itself?

NOTE ANY QUESTIONS ASKED ABOUT THE STUDY:

INFORMED CONSENT
Do you agree to take part in the interview? Is it ok with you for us to begin?
_____Verbal Consent provided

I would like to tape record the interview to help ensure accuracy of the interview notes. Once the notes have been compiled, we will destroy the tape. Is it ok with you for me to record the interview?
_____ Verbal Consent provided for use of tape recorder

Note to interviewers—fill in name or village name when [ ] in question.

Descriptive Information about Respondent

I'd like to begin by asking you a little about yourself.

1. What is your position in the school?
2. How long have you been with the school?
3. How long have you lived in [village]?

Community Norms Related to Oral Hygiene and Diet

I'd like to talk about the village norms related to oral hygiene and diet.

1. What is the typical diet for the children of the village?
    a. Is this different from the typical adult diet?
    b. We've seen posters encouraging villagers to eat more native foods. Do you think this is happening?
2. Does the school do anything to encourage eating less sugary foods? IF YES: Can you describe what is done?
3. How would you describe village residents' attitudes towards eating foods and drinks that have a large amount of sugar?
4. Have you seen any changes in attitudes about eating a lot of sugary foods in the past year for people in the village?
    a. If yes, how?
    b. What do you think has caused these changes?
5. How would you describe the dental habits of the residents of the village?
    a. Do you think adults in the village brush daily? Why do you think this?
    b. Do you think children in the village brush their teeth at home every day? Why do you think this?
6. What are your thoughts regarding water fluoridation for the village?
    a. How do you think the residents feel about this?
7. What is the biggest barrier to having healthy teeth for adults in [village]?
8. What is the biggest barrier to having healthy teeth for children in [village]?
9. Have there been any changes happening in the village that you think might help people have healthier teeth in [village]?

Access to Care

Now I would like to ask you some questions about getting dental care in the village.

1. Has the ability to get dental care for children in the village changed since [the DHAT] started practicing in the village? IF YES: How?
    a. Can you give any specific examples of what has changed?

    IF NO: Why not?

    b. What do you think is the main reason children in the village have difficulty getting dental care since [the DHAT] has started working in the village?
2. Does the school do anything to help children get dental care?
3. Has the ability to get dental care changed since [the DHAT] started working in the village?
    a. Why (or why not)?
4. Has [the DHAT] taken any steps to encourage children to come in for routine exams?
    a. IF YES: What are these and have they been effective?
    b. IF NO: Are there any steps you would recommend to help get children in for routine dental exams?
5. Is there any [other] established relationship with the schools to help get dental care for children?
    a. How would you describe the relationship between [the DHAT] and the school?
    b. When was this relationship established?
    c. What kinds of things are done?
    d. Who maintains this relationship?
    e. What are examples of [the DHAT's] work in the schools?

Access to Emergency Care

1. Has the ability to get emergency dental care for children in the village changed as a result of [the DHAT's] practicing in the village?
    a. If yes: How?
    b. If no: Why not?
2. Are you aware of any examples in the last month in which [the DHAT] was able to provide emergency care for a child in the village? (You don't need to give us names.)
    a. Are there other examples that come to mind?

PROBE IF NOT MENTIONED

3. What about care related to fixing urgent dental problems, such as cavities or the need to pull teeth?
    a. Can you think of examples in which [the DHAT] has done these in the past month?

Prevention Activities

1. Are you aware of any prevention activities, such as educational efforts, brushing instruction, etc., that have occurred in the village?
    a. Did [the DHAT] play a role in getting these started?
    b. Are the activities ongoing?
        i. Why (or why not)?

    Probes if not previously mentioned:

    c. Does [the DHAT] conduct any prevention activities in conjunction with the schools?
    d. Does [the DHAT] conduct any prevention activities other than what is occurring in school?

Adverse Impacts and Unintended Consequences

1. What about any unexpected positive things that may have occurred for the village? Have there been any of these?
    a. If yes, can you tell me more about these?
2. Are you aware of any problems from having [the DHAT] practicing in the village?
    a. Have there been any reports of complications or health-related issues?
        i. For any of the adults?
        ii. For any of the children?
    b. Do you have any concerns about what [the DHAT] is doing in terms of:
        i. Quality of care being offered?
        ii. Sanitation of the working space?
        iii. Anything else?
3. What about problems or unexpected things that have happened at the village level? Are you aware of any changes or outcomes for the village that have been problems?

Satisfaction with the DHAT

1. Are the school personnel generally satisfied with [the DHAT's] performance?
    a. Why (or why not?)
2. Are you aware of any problems patients have had with [the DHAT]? If yes, please describe these.
3. How has [the DHAT] been accepted by the people of the village?
4. Do you think village residents are generally satisfied with what [the DHAT] is accomplishing in the village?
    a. Why (or why not)?
5. How do you think the village residents perceive having a dental therapist, compared with a traditional dentist, such as some of the itinerant dentists who have provided care for the village?

Implementation Issues

1. Have there been any [other] benefits to the clinic from having a DHAT practicing here? IF YES: What are the benefits?
2. Have there been any [other] disadvantages to having a DHAT practicing in the village? IF YES: What are the disadvantages?
3. IF YES TO 2: Of the disadvantages you mentioned, what would you consider to be the biggest disadvantage?

Summary

1. In summary, what are the main benefits or advantages of having [the DHAT]?
    a. Which of these would you consider to be the most important?
2. What are the problems or disadvantages of having a DHAT in the village?
    a. Which of these would you consider to be the most important?

3. What suggestions would you offer for improving the DHAT program? If you could send one message to those who have been funding the DHAT project, what would it be?

STAKEHOLDER INTERVIEW
Community Health Aide for DHAT Home Village

INTERVIEWER:

RESPONDENT:

RESPONDENT CATEGORY**:**

DATE AND TIME OF INTERVIEW**:**

Overview

I'm _____ from RTI International. We're conducting an evaluation of the Dental Health Aide Therapist (DHAT) program. The evaluation is being conducted for the W.K. Kellogg Foundation, the Bethel Community Foundation, and the Rasmussen Foundation, in partnership with the Alaska Native Tribal Health Consortium. These organizations are interested in the effects of the Dental Therapist program on access to care and dental quality which we will be evaluating. We also will be assessing the implementation of the Dental Therapist program to explore what is working well and areas that may need improvement to better serve the village.

We appreciate your willingness to speak with us today. Your answers will be kept confidential—when we report results, we will not provide your name. The interview should take 30–45 minutes and you may discontinue the interview at any point. Do you have any questions about the interview or the study itself?

NOTE ANY QUESTIONS ASKED ABOUT THE STUDY:

INFORMED CONSENT
Do you agree to take part in the interview? Is it ok with you for us to begin?
_____Verbal Consent provided

I would like to tape record the interview to help ensure accuracy of the interview notes. Once the notes have been compiled, we will destroy the tape. Is it ok with you for me to record the interview?
_____ Verbal Consent provided for use of tape recorder

Note to interviewers—fill in name or village name when [ ] in question.

Descriptive Information about Respondent

I'd like to begin by asking you a little about yourself.

1. How long have you been with the clinic?
2. How long have you been a community health aid?
3. What is your organizational relationship with [the DHAT]?
4. How long have you lived in [village]?

Community Norms Related to Oral Hygiene and Diet

Now I'd like to talk about the village norms related to oral hygiene and diet.

1. What is the typical diet for the children of the village?
    a. Is this different from the typical adult diet?
    b. We've seen posters encouraging villagers to eat more native foods. Do you think this is happening?
2. What do you see as the biggest barrier to having healthy teeth and gums as a result of the diet and nutritional practices of people here in the village?
3. How would you describe village residents' attitudes toward eating foods and drinks that have a large amount of sugar?
4. Have you seen any changes in attitudes about eating a lot of sugary foods in the past year for people in the village?
    a. If yes, how?
    b. What do you think has caused these changes?
5. How would you describe the dental habits of the residents of the village?
    a. Do you think adults in the village brush daily? Why do you think this?
    b. Do you think children in the village brush their teeth at home every day? Why do you think this?
6. What are your thoughts regarding water fluoridation for the village?
    a. How do you think the residents feel about this?
7. What is the biggest barrier to having healthy teeth for adults in [village]?
8. What is the biggest barrier to having healthy teeth for children in [village]?
9. Have there been any changes happening in the village that you think might help people have healthier teeth in [village]?

Access to Care

Now I would like to ask you some questions about getting dental care in the village.

1. Has the ability to get dental care changed since [the DHAT] started practicing in the village? IF YES: How?
    a. Can you give any specific examples of what has changed?

    IF NO: Why not?

    b. What do you think is the main reason people don't have an easier time getting dental care since [the DHAT] has started working in the village?
2. Have the changes in the ability of village residents to get dental care since [the DHAT] started working here been consistent with your expectations?
    a. Why (or why not)?
3. Assuming there are roughly 20 work days in a month, approximately what percentage of time would you estimate that [the DHAT] was available to see patients in [village] in the past month?
    a. Was this a typical month?
4. In a typical day, approximately how many patients would you estimate [the DHAT] sees?
5. What kinds of steps are taken to encourage patients to come in for routine exams?
    a. Who is responsible for these?
6. Is there an established relationship with the schools to help get dental care for children?
    a. How would you describe the relationship between [the DHAT] and the school?
    b. When was this relationship established?
    c. Who maintains this relationship?
    d. What are examples of [the DHAT's] work in the schools?

Access to Emergency Care

1. Has the ability to get emergency dental care for people in the village changed as a result of [the DHAT's] practicing in the village?
    a. If yes: How?
    b. If no: Why not?
2. Are you aware of any examples in the last month in which [the DHAT] was able to provide emergency care for someone in the village?
    a. Are there other examples that come to mind?

PROBE IF NOT MENTIONED

3. What about care related to fixing urgent dental problems, such as cavities or the need to pull teeth?
    a. Can you think of examples in which [the DHAT] has done these in the past month?

Prevention Activities

1. Are you aware of any prevention activities, such as educational efforts, brushing instruction, etc., that have occurred in the village?
    a. Did [the DHAT] play a role in getting these started?
    b. Are the activities ongoing?
        i. Why (or why not)?

    Probes if not previously mentioned:

    c. Does [the DHAT] conduct any activities in conjunction with the schools?
    d. Does [the DHAT] conduct any prevention activities other than what is occurring in school?

Adverse Impacts and Unintended Consequences

1. Are you aware of any problems from having [the DHAT] practicing in the village?
    a. Have there been any reports of complications or health-related issues?
        i. For any of the adults?
        ii. For any of the children?
    b. Do you have any concerns about what [the DHAT] is doing in terms of:
        i. Quality of care being offered?
        ii. Sanitation of the working space?
        iii. Anything else?
2. What about any unexpected positive things that may have occurred for the village? Have there been any of these?
    a. If yes, can you tell me more about these?
3. What about problems or unexpected things that have happened at the village level? Are you aware of any changes or outcomes for the village that have been problems?

Satisfaction with the DHAT

1. Do you think the clinic staff is generally satisfied with [the DHAT's] performance?
    a. Why (or why not?)
2. Do you think tribal leadership is generally satisfied with [the DHAT's] performance?
    a. Why (or why not?)
3. Are you aware of any problems patients have had with [the DHAT]? If yes, please describe these.
4. How has [the DHAT] been accepted by the people of the village?
5. Do you think village residents are generally satisfied with what [the DHAT] is accomplishing in the village?
    a. Why (or why not)?
6. How do you think the village residents perceive having a dental therapist, compared with a traditional dentist, such as some of the itinerant dentists who have provided care for the village?

Implementation Issues

1. Have there been any [other] benefits to the clinic from having a DHAT practicing here?
   IF YES: What are the benefits?
2. Have there been any [other] disadvantages to having a DHAT practicing in the clinic?
   IF YES: What are the disadvantages?
   PROBES:
    a. Challenges stemming from [DHAT's] work schedule?
    b. Acceptance by other staff?
    c. Numbers of people in clinic's waiting area?
    d. Excess noise?
    e. Loss of file or storage space?
3. IF YES TO 2: Of the disadvantages you mentioned, what would you consider to be the biggest disadvantage?

Summary

1. In summary, what are the main benefits or advantages of having the DHAT?
    a. Which of these would you consider to be the most important?
2. What are the main problems or disadvantages of having a DHAT in the village?
    a. Which of these would you consider to be the most important?
3. What suggestions would you offer for improving the DHAT program? If you could send one message to those who have been funding the DHAT project, what would it be?

STAKEHOLDER INTERVIEW
Tribal Leadership from DHAT Home Village

INTERVIEWER:

RESPONDENT:

RESPONDENT CATEGORY**:**

DATE AND TIME OF INTERVIEW**:**

Overview

I'm _____ from RTI International. We're conducting an evaluation of the Dental Health Aide Therapist (DHAT) program. The evaluation is being conducted for the W.K. Kellogg Foundation, the Bethel Community Foundation, and the Rasmussen Foundation, in partnership with the Alaska Native Tribal Health Consortium. These organizations are interested in the effects of the Dental Therapist program on access to care and dental quality, which we will be evaluating. We also will be assessing the implementation of the Dental Therapist program to explore what is working well and areas that may need improvement to better serve the village.

We appreciate your willingness to speak with us today. Your answers will be kept confidential—when we report results, we will not provide your name. The interview should take 30–45 minutes and you may discontinue the interview at any point. Do you have any questions about the interview or the study itself?

NOTE ANY QUESTIONS ASKED ABOUT THE STUDY:

INFORMED CONSENT
Do you agree to take part in the interview? Is it ok with you for us to begin?
_____Verbal Consent provided

I would like to tape record the interview to help ensure accuracy of the interview notes. Once the notes have been compiled, we will destroy the tape. Is it ok with you for me to record the interview?
_____ Verbal Consent provided for use of tape recorder

Note to interviewers—fill in name or village name when [ ] in question.

Descriptive Information about Respondent

I'd like to begin by asking you a little about yourself.

1. What is your role within the tribal organization?
2. How long have you been in this position?
3. How long have you lived in the village?

Community Norms Related to Oral Hygiene and Diet

Now I'd like to talk about what people in the village typically eat.

1. What is the typical diet for the children of the village?
    a. Is this different from the typical adult diet?
    b. We've seen posters encouraging villagers to eat more native foods. Do you think this is happening?
2. How would you describe village residents' attitudes toward eating foods and drinks that have a large amount of sugar?
3. Have you noticed any changes in attitudes about eating a lot of sugary foods, such as cookies, candy, soda pop, or sugar Koolaid, in the past year for people in the village?
    a. If yes, how?
    b. [If changes in attitudes or behavior are reported:] What do you think has caused the changes [probe for attitudes and behaviors]?

Now, let's talk about how people in the village take care of their teeth.

4. How would you describe the habits of people in the village for taking care of their teeth? For example:
    a. Do you think adults in the village brush daily? Why do you think this?
    b. Do you think children in the village brush their teeth at home every day? Why do you think this?
    c. Do adults get regular dental exams to check their teeth for problems? Why (or why not)?
    d. Do children get regular dental exams to check their teeth for problems? Why (or why not)?
    e. Have you noticed any changes in the ways that children's teeth are taken care of?
    f. Have you noticed any changes in the ways that adults' teeth are taken care of?
5. What are your thoughts regarding water fluoridation for the village?
    a. How do you think the residents feel about this?
6. What are some of the challenges that may keep some people in the village from having healthy teeth?
    a. Overall, what is the biggest barrier to having healthy teeth for adults in [village]?
    b. What is the biggest barrier to having healthy teeth for children in [village]?

7. Have there been any changes happening in the village that you think might help people have healthier teeth in [village]?

Access to Care

Now I would like to ask you some questions about getting dental care in the village.

1. Has the ability to get dental care changed since [the DHAT] started practicing in the village? IF YES: How?
    a. Can you give any specific examples of what has changed?

   IF NO: Why not?
    b. What do you think is the main reason people don't have an easier time getting dental care since [the DHAT] has started working in the village?
2. Have the changes getting dental care since [the DHAT] started working here been what you expected?
    a. Why (or why not)?
3. Assuming there are roughly 20 work days in a month, approximately what percentage of time would you estimate that [the DHAT] was available to see patients in [village] in the past month?
    a. Was this a typical month?
4. In a typical day, approximately how many patients would you estimate [the DHAT] sees?
5. What kinds of steps are taken to encourage patients to come in for routine exams?
    a. Who is responsible for these?
6. Is there an established relationship with the schools to help get dental care for children?
    a. How would you describe the relationship between [the DHAT] and the school?
    b. When was this relationship established?
    c. Who maintains this relationship?
    d. What are examples of [the DHAT's] work in the schools?

Access to Emergency Care

1. Has the ability to get emergency dental care for people in the village changed as a result of [the DHAT's] practicing in the village?
    a. If yes: How?
    b. If no: Why not?
2. Are you aware of any examples in the last month in which [the DHAT] was able to provide emergency care for someone in the village?
    a. Are there other examples that come to mind?

   PROBE IF NOT MENTIONED
3. What about care related to fixing urgent dental problems, such as cavities or the need to pull teeth?
    a. Can you think of examples in which [the DHAT] has done these in the past month?

Prevention Activities

1. Are you aware of any prevention activities, such as teaching children how to brush their teeth, instruction on diet, or other activities that have occurred in the village in the last year?
    a. Did [the DHAT] play a role in getting these started?
    b. Are the activities ongoing?
        i. Why (or why not)?

    Probes if not previously mentioned:

    c. Does [the DHAT] conduct any prevention activities with the schools?
    d. Does [the DHAT] conduct any prevention activities in addition to what is taking place in school?

Adverse Impacts and Unintended Consequences

1. What about any unexpected positive things that may have occurred for the village? Have there been any of these?
    a. If yes, can you tell me more about these?
2. Are you aware of any problems from having [the DHAT] practicing in the village?
    a. Have there been any reports of complications or health-related issues?
        i. For any of the adults?
        ii. For any of the children?
    b. Do you have any concerns about what [the DHAT] is doing in terms of:
        i. Quality of care being offered?
        ii. Any other concerns?
3. What about problems or unexpected things that have happened at the village level? Are you aware of any changes or outcomes for the village that have been problems?

Satisfaction with the DHAT

1. Were you part of the decision-making group that selected [the DHAT] for training?
    a. If yes, how was [the DHAT] selected?
    b. Were there any particular skills or characteristics you wanted to see?
    c. If you identify people in the future for DHAT training, what would you do differently?
2. Are you, as a tribal leader, generally satisfied with [the DHAT's] performance?
    a. Why (or why not?)
3. Are you aware of any problems that have occurred with [the DHAT]? If yes, please describe these.
4. How has [the DHAT] been accepted by the people of the village?
5. Do you think village residents are generally satisfied with what [the DHAT] is accomplishing in the village?
    a. Why (or why not)?
6. How do you think the village residents perceive having a dental therapist, compared with a traditional dentist, such as some of the itinerant dentists who have provided care for the village?

Implementation Issues

1. Have there been any [other] benefits to the clinic from having a DHAT practicing here?
IF YES: What are the benefits?

2. Have there been any [other] disadvantages to having a DHAT practicing in the clinic?
IF YES: What are the disadvantages?
PROBES:
   a. Challenges stemming from [the DHAT's] work schedule?
   b. Acceptance by other staff?
   c. Numbers of people in clinic's waiting area?
   d. Excess noise?
   e. Loss of file or storage space?

3. IF YES TO 2: Of the disadvantages you mentioned, what would you consider to be the biggest disadvantage?

Summary

1. In summary, what are the main benefits or advantages of having the DHAT?
   a. Which of these would you consider to be the most important?
2. What are the main problems or disadvantages of having a DHAT in the village?
   a. Which of these would you consider to be the most important?
3. What suggestions would you offer for improving the DHAT program? If you could send one message to those who have been funding the DHAT project, what would it be?