

# An Assessment of the Alaska YKHC EPSDT Pilot Project

## A CompCare Initiative

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Alaska State CompCare Team

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## Overview

Health Management Associates was asked to evaluate an innovative pilot project in which well child health care in the Yukon-Kuskokwim Delta Region of Alaska is provided by Community Health Aides (CHAs) and Community Health Practitioners (CHA/Ps). We conducted our review by looking at data that shows what services were provided by which providers, by examining the structure of the project, and by talking with medical providers and parents with children enrolled in the Medicaid Program and living in the region. We found that the number of well child health services provided increased significantly after the pilot began, and that the CHA/Ps contributed both directly and indirectly to the higher level of well child services delivered. We concluded that using CHA/Ps is an effective way to improve medical care for children in a remote region. We also concluded that the success of this pilot was related to thoughtful advance planning and careful monitoring as the pilot was implemented. The structure of the pilot was also important to its success. Lessons from this pilot may assist other areas of Alaska that want to adapt the piloted approach to the circumstances in their own areas.

## Purpose of the Study

The purpose of this study is to examine the impact and effectiveness of an innovative Medicaid pilot program for the delivery of preventive and well-child health care services for school age children in the Yukon-Kuskokwim Delta Region of Alaska. Under the pilot, specially trained lay providers known as Community Health Aides (CHAs) and Community Health Practitioners (CHPs) provide health care services—including preventive care and health screening services. Alaska is the only state for which the federal government has authorized operation of Community Health Aides and Practitioners (CHA/Ps). The CHA/P program has its roots in Russian Alaska and the tuberculosis epidemic of the 1950's, as a response to a need to bring modern health care to small groups of people living in widely scattered villages in bush Alaska. The study examines the question of how well this pilot program has worked in the delivery of preventive health care services.

## Background and Introduction: EPSDT

In the Medicaid Program, preventive and well-child health care services are provided under a special component known as the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) Program. Under EPSDT, Federal Medicaid law requires that children enrolled in Medicaid from birth to age 21 receive regular well-child health screenings, and that screenings occur according to an approved periodicity schedule. Children are to receive age-appropriate services and tests, including a comprehensive health and developmental history, physical exam, immunizations, laboratory tests and health education. Under EPSDT, Medicaid-enrolled children are also entitled to hearing, dental and vision services, including eyeglasses, and any other covered medical, diagnostic or treatment service required to correct or ameliorate a physical or mental condition discovered in an EPSDT screen. This is required even if the services are not otherwise covered in the state Medicaid plan. In addition to the required services, state Medicaid agencies are mandated to outreach to families of children to inform them about EPSDT services, proactively assure that services and referred services are received, and assist families in making appointments and arranging travel to medical appointments.

The federal agency that administers Medicaid (the Centers for Medicare and Medicaid Services [CMS] in the U.S. Department of Health and Human Services) has indicated in regulation (pursuant to Congressional direction set forth in 1989) that a state should achieve a screening rate of 80%. In other words, 80% of the age-appropriate EPSDT screenings should be provided each year.

Thus, EPSDT is a priority component of the Medicaid Program that places special emphasis on prevention and primary care for children and the early detection of health problems so their correction can yield benefits over the lifetime of the child.

## Alaska EPSDT: Background and Screening Performance

In the early years of the Medicaid Program in Alaska, primary responsibility for the provision of the EPSDT comprehensive screening services was placed with Public Health Nursing in the Alaska Department of Health and Social Services due to a limited number of physicians in the state. As the number of private providers grew in urban areas, Public Health Nurses (PHNs) concentrated efforts to rural communities. The native health care system (formerly the Indian Health Service, but now operated by the tribes under a statewide compact) is the sole provider in most rural areas of Alaska, and works cooperatively with the PHNs in the delivery of health care to children. The Public Health Nurses are specially trained to provide the comprehensive EPSDT exam and to initiate appropriate referral and follow up services. When other medical providers such as the family doctor or the child's pediatrician provide comparable services, those services also count as EPSDT services.

Achievement of the EPSDT performance goals has consistently been a priority of the Alaska Medicaid program. Historically, within available resources, PHNs have done an excellent job with the implementation of EPSDT. However, health care resources in Alaska have never been sufficient to fully achieve the level of performance everyone regards as appropriate. Delivery of EPSDT services to school age children in rural Alaska is a particular challenge due to the climate, vast areas, lack of transportation infrastructure and limited numbers of providers. These challenges are exacerbated by the poor health status of the Alaska Native population, the under-funding of the Indian Health Service, and the high birth rate among Alaska Natives, all of which have placed demands on the delivery system that have outstripped Public Health Nursing capacity.

Achievement of the EPSDT performance target of 80% has proved to be extraordinarily difficult in most states. Performance is monitored annually by the federal agency (CMS) responsible for the Medicaid Program by way of the HCFA-416 report. A review of the data in the HCFA-416 reports offers a glimpse of the scope of the issue, and the challenges faced by Medicaid agencies trying to achieve the targeted number of children receiving EPSDT screens.

The most recent HCFA-416 report for Alaska shows the following performance for the federal fiscal year 2001 (the year ending September 30, 2001). In 2001, for any part of the year, a total of 80,927 children from newborn through age 20 were enrolled in the Alaska Medicaid Program. However, the periodicity schedule for screens varies by age, calling for five screens up to age one: four screens for ages 1 through 2 (12, 15, 18, and 24 months); one screen per year ages three through five (3, 4, 5 years); and finally one screening every other year for children ages 6 through 20 (6, 8, 10, 12, 14, 16, 18, 20 years). Based on the ages of children enrolled in Medicaid in 2001, the total number who should have received an exam was 47,115.

The *participant ratio*: Of these 47,115 individuals needing an exam, the number who actually received an exam was 23,565. This means the *participant ratio* was 50%. In other words, half of individuals who were eligible and should have received the EPSDT well-child screening exam actually did.

The *screening ratio*: Another measure of performance is the *screening ratio*—the number of screens provided compared to the number of total screens that should have been provided. This measure takes into account the fact that the periodicity schedule calls for more screening exams in the earlier years of life, the total number of months of eligibility and the age groups of the children of the Alaska Medicaid program in 2001. Based on these factors, the number of EPSDT exams provided should have been 61,413. The number actually provided was 36,587. This results in a *screening ratio* of 60%.

For a variety of reasons, younger children are more likely to receive EPSDT screening exams. In 2001, the Alaska *participant ratio* was 81% for children in the first year of life, but was 30% for those ages 15 to 20.

Similarly, the screening ratio is higher for younger children. For children in the first year of life in 2001, the screening ratio was 103% (i.e., some children received more than five countable EPSDT exams.) The screening ratio for ages 1 to 5 was 53%, for ages 6 to 14 was 41%, and for ages 15 to 20 was 29%.

Table 1 shows Alaska EPSDT performance measures for two years, 1998 and 2001. The data in this table illustrate three important points. The first is that over the past three years EPSDT has been a priority in Alaska. The Division of Medical Assistance has worked hard to find strategies to improve prevention and primary care for children enrolled in Medicaid. The Yukon Kuskokwim (YK) EPSDT pilot project is one example of this priority. The data show an overall statewide success in improving EPSDT performance.

Second, reflective of this overall priority, EPSDT performance in Alaska increased dramatically in the three years from 1998 and 2001. Over this relatively short period of time the number of children eligible for EPSDT grew significantly, from 58,266 to 80,927, an increase of 39% (due to the introduction of Denali Kid Care, which raised the income threshold for eligibility to 200% of the Federal Poverty Level). However, EPSDT performance increased even faster: the number of children receiving EPSDT screenings increased by 86%, from 12,640 to 23,565, and the number of screenings increased by 72%, from 21,279 to 36,587. Part of this increase but not all was probably a result of CMS allowing inclusion of CPT Evaluation and Management Codes and corresponding ICD-9-CM V Codes in addition to the CPT Preventive Medicine Service Codes already used to document the receipt of an initial or periodic screen during the latter part of this same time period.

Third, the data reveal a clear relationship between screening performance and age. The Yukon Kuskokwim Health Corporation (YKHC) EPSDT pilot project by its design addresses this relationship, by dividing the EPSDT responsibility by age between Public Health Nursing and the YKHC. Historically, primary responsibility for EPSDT screening for children of all ages was with Public Health Nursing. However, the resources of public health nursing simply could not be stretched to assure screenings for all age groups. With limited resources, the first priority was to focus on screenings for the youngest children. Under the YKHC EPSDT pilot, public health nursing was able to focus on pre-school age children and the YKHC with the CHA/Ps focusing on children of school age.

<b>Table 1.</b>		
<b>Alaska EPSDT Performance Measures, 1998 and 2001</b>		
<b>EPSDT Measure</b>	<b>1998</b>	<b>2001</b>
1. Total Number of Individuals Eligible for EPSDT	58,266	80,927
2. Total Eligibles who should receive at least one initial or periodic screen: All ages 0-20	39,585	47,115
By Age: 0-1	6,577	5,509
1-5	16,908	20,582
6-14	11,266	15,030
15-20	4,834	5,992
<b>2. Screening Ratio: All ages</b>	<b>.37</b>	<b>.60</b>
By Age: 0-1	.50	1.03
1-5	.36	.54
6-14	.25	.41
15-20	.09	.30
<b>3. Participant Ratio: All ages</b>	<b>.31</b>	<b>.50</b>
By Age: 0-1	.66	.82
1-5	.30	.54
6-14	.24	.41
15-20	.09	.30
Source: HCFA-416 Reports for Alaska for federal fiscal years 1998 and 2001.		

## The Yukon Kuskokwim Region

The Yukon-Kuskokwim Delta is in Southwestern Alaska approximately 400 air miles from Anchorage. The Delta encompasses over 75,000 square miles of coastal wetland and tundra bordered by the Bering Sea, and is approximately the size of the State of South Dakota. There are 50 Eskimo and Indian villages along the Yukon and Kuskokwim Rivers and their tributaries. The large river system includes most Bering Sea coastal communities as well as villages on Nunivak and Nelson islands.

The climate and geography of the Delta pose serious transportation limitations that are compounded by the lack of a road system. The rivers, tributaries and network of lakes provide linkages between villages by boat in summer and snowmachine and all terrain vehicles after freeze up. Many small air carriers provide scheduled and chartered flight service between villages and the Hub City of Bethel. Bethel also contains a docking facility for barges and is the major source of supplies shipped to the region.

Electricity, water, sewer, and solid waste collection are available in most of Bethel. All the surrounding villages have electricity, but few have adequate water, sewer, and solid waste facilities. The lack of water and sanitation facilities in the region continues to be a major public health concern as well as an impediment to community development

Over 23,000 people live in the Delta, with in excess of 5,400 residing in the City of Bethel. Forty-five percent of the population is under the age of 19. Excluding Bethel, fully 95 percent of the population is Alaskan Native (Yup'ik and Cup'ik Eskimo and Athabaskan Indian). Although the City of Bethel is the only community with a large non-native population, it is still 68 percent Alaskan Native. Seventy-seven percent of the households in the Delta are bilingual, 11 percent speak Yup'ik only, and 10 percent speak English only.

The population of the Delta is in transition from a traditional subsistence-based lifestyle to a blended subsistence and cash economy. This fundamental change is rapidly occurring and affects every facet of life in the Delta including economics, eating habits, and gender roles and responsibilities. The cultural transition has resulted in high stress levels that have contributed to the overall poor health of Alaskan Native peoples. Over 40 percent of the Delta's families live below the federal poverty level; unemployment is high. The Delta is experiencing the largest population growth rate in the state due to birth rates of 26.9 percent and 29.5 percent per thousand in the two census areas that largely comprise the area (compared to a 16 percent statewide birth rate).

State and federal studies have documented high rates of alcoholism, suicide, and domestic violence that have resulted from the rapid pace of social change. The suicide rate among

Alaskan Natives in the Delta is over three times that of the US population, and the alcohol-related death rate is higher than other regions in Alaska.

## The Yukon Kuskokwim Health Corporation (YKHC) EPSDT Pilot

The YKHC EPSDT pilot project was designed to expand EPSDT service delivery so more children who were eligible and needing EPSDT prevention and primary care services could receive them. Under the pilot project, EPSDT responsibility was divided between Public Health Nursing and YKHC based on the ages of the children, with public health nursing taking responsibility for children ages birth through age 4, and YKHC taking responsibility for school age children, ages 5 to 20 - a population that was largely unserved prior to the project. The services provided by YKHC were to be delivered through the network of Community Health Aides and Practitioners located in each village. YKHC entered into a Continuing Care Provider Agreement with the state in 1998, as part of the pilot project, to take over the administrative responsibilities of outreach and assistance with transportation and referral appointments. YKHC also developed a case management component to assure that children were monitored and reminded about needed screens and referrals, and a Travel Management Center to coordinate travel services for Delta residents needing health care services.

CHA/Ps receive special training and certification under established standards in the three training centers in Alaska. The Community Health Aide Program Certification Board provides five levels of certification. According to Medicaid policy, effective on April 1, 1998, Medicaid was able to reimburse services provided by individuals certified at CHA Levels III and IV and by CHPs. For the pilot project, an additional training program was designed in collaboration with Public Health Nursing to address all of the elements of a comprehensive well child screening.

CHA/Ps are employed by the YKHC and operate under the supervision of YKHC physicians, and within the scope of standing orders applicable to their certification level. CHA/Ps maintain daily phone contact with their supervising physicians for consultation on complex cases. The supervising physician is enrolled with the Medicaid Program, assumes professional

responsibility for the CHA/P services, and assures that the services are medically appropriate. For the pilot project, YKHC created a coordinator position and clinical instructor/educator positions all of who are registered nurses, as well as administrative assistant positions. These staff provide program oversight, review well child screens for completeness, provide on-going training for the CHA/Ps (including immunization training and record maintenance), and monitor community outreach events, village communications and data input.

During the planning of the pilot, YKHC had concerns that the need for referral services would outstrip the capacity to provide the services, particularly in the areas of dental and behavioral health services. YKHC developed a separate project to expand behavioral health services, prevention and treatment, at the village level through development of village-based counselors, expansion of treatment capacity in Bethel, and care coordination. The inability to attract and retain additional dentists to serve the Delta led YKHC to embrace the new CHA/P Dental Specialist Certification. Additional dental specialists trained under the program will increase services rendered by dentists and the CHA/P dental specialists will be used in the future to promote oral hygiene, healthy eating habits and to provide fluoride treatment for children.

## Methodology for the Assessment

This study was undertaken in three distinct steps. The first step was a review of available information about the YKHC pilot project. This involved review of reports and discussions with staff from the Alaska Department of Health and Social Services including the Divisions of Medical Assistance and Public Health as well as YKHC. The goal of this review was to understand the structure of the pilot project and how it was designed and implemented.

The second step was a series of on-site discussions with individuals in the YK Region, with an eye toward obtaining qualitative information about how the EPSDT pilot program was working. The scheduled visit included discussions about the pilot program with health care providers, including CHA/Ps and the providers they work with, program beneficiaries and the leadership of the YKHC. These discussions took place during April 2002 in Bethel and the villages of Hooper Bay, Aniak and Kwethluk. By talking with those who provide and receive

the services we were able to focus on how the EPSDT preventive care was delivered and any issues or concerns that were present. We also were able to observe first hand where, how, by whom and for whom the services are delivered.

The third step was to identify data about service delivery and to obtain and analyze the data. This step involved the collection of a significant file of data from the Medicaid paid claims file, and also from the public health data system known as RPMS. These data provided the basis for a quantitative assessment of the overall impact of the pilot program and how the pilot program may have contributed to the increased likelihood that a child would receive a well child service and would be referred for other services found to be needed as a result of the EPSDT screening exam.

## The Design and Structure of the EPSDT Pilot

The pilot project was carefully designed and structured. The time, effort and care that were taken to plan the organization and structure of the project contributed significantly to its success.

Materials obtained for this assessment provided an overview of the business plan and the formal organizational structure for the project. The goal of project planners was to address all aspects of the project in advance assuring that controls and processes were in place prior to start up so services would meet standards of quality and appropriateness.

The following information is reproduced as it was provided, in order to illustrate the thorough nature of the planning and organizational structure that was put in place.

Essential Elements of the EPSDT Project include:

- **A Business Plan** – The business plan developed in conjunction with the State of Alaska Division of Public Health assured advance planning of each aspect of the Well Child Project according to the Board goals and agreement with the state. The plan provided for pilot villages for

the project and constant reassessment of the program, with necessary revisions as lessons were learned.

- **Training** – The design of the training program included development of the initial training module in collaboration with Public Health Nursing. Once trained, the well child CHP received on-site assessments and refresher courses, and new modules were developed to address identified issues.
  
- **Outreach and Enrollment** – Assuring that community members were aware of the Well Child Program and accepted the concept of preventive care was essential to program success. In addition, enrollment of children in Medicaid assured maximum reimbursement for the services delivered and that children screened would have access to other benefits Medicaid offers.
  
- **Quality Assurance and Evaluation** – Quality Assurance measures, such as the CHP Cognitive Skills Evaluation, are essential to assure that a high level of care is rendered. In addition, each screen was reviewed for completeness, with feedback to the CHP.

Post-visit parent questionnaires are distributed randomly to families and evaluated. These questionnaires allow YKHC to gauge community perceptions of the program and to adjust various aspects of the program to assure its success.

A formal organizational structure was created for the pilot project. The two primary elements of the structure were the Steering Committee and the Well Child Office. Materials provided for our review are summarized below to illustrate the specific expectations identified for these two key organizational components.

## Organizational Structure of the Project

**Steering Committee.** The Steering Committee, comprised of senior management and program directors at YKHC and DHSS with active participation of clinical providers, assures that the philosophy, goals and objectives remain on target and proactively addresses underdeveloped or problem areas. Valuable components are:

- **The Financial Management Workgroup** – To establish baseline information, isolate and project costs and develop and produce the annual cost report, track activities of the well child project for long term monitoring of the effects on the health care status of the children. The group also created and piloted the village clinic registration form and well child charge form to assure that appropriate information is obtained and data entered to track children for care coordination and billing of services.
  
- **Immunization Work Group** – To address the development of a consolidated immunization reporting and tracking system for village based, PHN, and hospital based childhood immunizations, to improve the immunization rates of children, and educate all providers in the health system of the importance of documenting immunizations, minimize “missed opportunities” to immunize children, and avoid over or under immunizing children.
  
- **Hospital-Based Workgroup** – To coordinate the incorporation of the Well Child Project in the villages with the physicians and midlevel providers who render care in the Pediatric Clinic, increase the number of well child screens delivered at hospital clinics, and analyze and evaluate needs for services at the clinics in order to plan delivery models.
  
- **Referral, Scheduling and Travel WorkGroup** – Management and coordination of scheduling for referral services and related travel was a major obstacle of the project. This group planned and implemented a consolidated scheduling system within the organization and experimented with different delivery models to assure efficient delivery of services.

Well Child Office. The Well Child Office was formed to coordinate all aspects of the village based project and assure integration of outreach, screening, referrals, follow-up, quality assurance and evaluation.

- **Well Child Coordinator** – This position assures overall coordination of the project, reviews all screens for accuracy and completeness, monitors referrals, and carries responsibility for filed follow-up visits of the CHPs, evaluation of clinical skills and development of the well child checklist.
  
- **Clinical Instructors** – The instructors are responsible for the initial training of the CHPs in well child screening and assessment skills, on-site supervision of the CHPs at regular intervals, and provision of the advanced training modules of instruction, village based training and other activities.

- **Outreach and Enrollment** – These functions are essential in assuring the community acceptance of the Well Child Project, delivery of services to children, and Medicaid enrollment to maximize reimbursement. The Community Health Representative (CHR) was initially assigned this function, but the demands were too great due to other duties. Consequently, a Health Promotion Outreach Worker position was created for a few years. Currently, the Clinical Instructors oversee outreach activities, and YKHC's Medicaid enrollment staff assist with enrollment and entitlement issues.

The outreach and enrollment function is to proactively inform the public of the value of well care, to identify Medicaid-enrolled children due screens from DPH, schedule appointments, and coordinate travel arrangements for referred services. Village outreach activities consists of distribution of posters and fliers, arrangements for radio announcements and the conduct of health fairs in the schools. Currently, the school health fairs are coordinated with clinic days for well child exams. Interactive health education is conducted with the children by a team made up of a clinical instructor, the well child coordinator, a dental hygienist and a health educator.

- **Quality Assurance and Evaluation** – These components of the program monitor the quality of the Well Child Program with a goal of continuous quality improvement. The cognitive skill evaluation of the well child CHPs, review of EPSDT screen forms, and village based refresher courses and new training modules, are all part of assuring quality health care delivery. Consumer satisfaction surveys and focus groups provide on-going evaluation of the program from the customers, and help YKHC orient the program to address issues identified by families and communities. YKHC has also initiated an internal evaluation of the program to monitor the trends in health status of the children through a longitudinal monitoring of health indicators.

**Focus Group Discussions.** During the site visit, focus groups were conducted to help us learn how community people felt about health care services for their children, how aware they were about the well child program that provides EPSDT services, how comfortable they were with CHA/Ps providing the services, and about issues or concerns they might have about health care delivery in their village.

During the last week of April 2002 focus group discussions took place in Hooper Bay, Aniak and Kwethluk. These groups were organized and led by YKHC staff. Participants were self-selected, responding to notices of the opportunity to discuss health care issues in their village. The notices indicated that participants would receive oranges and apples and that each

participant would be entered into a drawing for a 55-gallon barrel of heating oil. Some of the participants were CHA/Ps, but most were parents or other adults in the community with an interest in village health care issues.

Each focus group was characterized by lively discussion. Participants were open in their assessment of the well child program and how they interacted with the health care system and the health care providers. The focus groups provided valuable information on how CHA/Ps are regarded and how their services are valued.

Several important messages emerged from the focus group discussions. These included:

- The CHA/Ps and the services they provide are highly regarded and valued by the people served in the villages. Focus group participants were quick to offer their appreciation for the work of the CHA/Ps. The care they provide was described in terms that conveyed satisfaction and confidence in the quality of care and appreciation that the CHA/Ps were available to provide care in the village. Most of the care the CHA/Ps provide is for children and adults who are sick or have an injury. The comments related both to the well-child care and to the care provided when someone was sick or injured.

Comments included the following:

*“We are really fortunate. The health aides we have now are really good. The training they are getting is really good.”*

*Our experience is “real good.”*

*“No problems.”*

Without question, the individuals we spoke with offered a high assessment of the care provided by CHA/Ps, whether it was preventive well child care (the “head-to-toe” exam) or care for sick or injured children.

- In the eyes of parents, the Well-Child Program helps keep their children healthy and is a good way to find any problem that needs to be corrected. Parents in the focus group discussions were clear in their interest in taking advantage of the preventive care available in the well-child check-ups.

No one discounted the value of the check up, although one mother observed that as long as her child was well, she did not worry about taking him in to have a check up. Parents offered examples of how the check ups discovered a problem that was corrected and benefited the child. Parents also appreciated how the system kept track of when the screening exam was needed, how they were contacted when it was time for an exam and how any needed referral was tracked.

Comments included:

“I am really glad they have this well-child check-up. We found out the child needed glasses. That’s why he wasn’t doing so well in kindergarten.”

“Whenever they let us know we should come in, we take them [the children] right in.”

One parent: “The well-child documents all the problems.”

Second parent responding: “And it doesn’t stop there. They follow up on the appointments.”

Overall, there was appreciation and respect for the work of the CHA/Ps in the community and for the well child program.

- The Well Child program highlights continuing issues with the dental care. The Well-Child check up for the most part is able to find, treat or refer the medical issues. Referrals for dental care were mentioned as an issue several times. Clearly, the shortage of dentists makes referrals difficult. The dental component of the well-child program is appreciated for the good that it does, but the challenges of limited dental capacity and access create problems for everyone, regardless of age or insurance coverage.

Comments included:

“When the dentists come, they only see kids with toothaches. There are a lot of kids they don’t see.”

“I wish we had well child when I was young.”

“Why?”

“Because I’d probably have all my teeth.”

- Caring for sick and injured children and adults is the priority for CHA/Ps. Sometimes, caring for the sick and injured crowds out well-child care. CHA/Ps primarily see adults and children who are sick or injured and that clearly is their priority. Where capacity is limited, the demands of this care can crowd out children scheduled for well-child care. In one village parents and CHA/Ps described how they were over-burdened with patients and could not see children for well-child care when they did not have time that day. One parent who had waited weeks for a scheduled well-child appointment was turned away after arriving for the appointment, and had to reschedule the well child appointment for the next available time, several weeks into the future.

This situation was observed in only one of the villages where we conducted focus group discussions. The other villages appeared to have ample capacity for well child visits, even to the point in one clinic of being able to schedule a same-day well child appointment if requested. However, this situation, isolated as it may be, demonstrates that well-child care likely will not be provided when the demands of providing sick care exceed the capacity of the CHA/Ps located there. CHA/Ps are expected to schedule and provide just two EPSDT exams per week. When a CHA/P has a full patient load, fully meeting this target of two EPSDT exams per week is not easy.

Comments in one village included:

*“We are always booked with sick patients.”*

*“My kids have not had the well child. We were tired of waiting.”*

*“Sometimes we have to bump children from well child because of too many sick kids.”*

*[I was told...] “We are bumping your child off because someone is sick.”*

*“It would be better if we didn’t have to wait so long.”*

*“They [CHA/Ps] are an essential part of the delivery system. But there are not enough to meet the need.”*

These comments highlight a key feature of using CHA/Ps for well-child care. CHA/Ps first and foremost are the front line of the health care system that serves the bush country of Alaska. Of necessity, their priority is sickness and trauma care for persons in the villages. The focus group discussions provided ample evidence of how the CHA/Ps and the care they provide is valued and respected. The CHA/Ps extend and expand the capacity of the healthcare delivery system quite effectively in a way that has earned the appreciation of the people who are served. This expansion has highlighted limitations of other services, such as referrals for dental care.

## Medical views on the quality of care provided by CHA/Ps

Discussions were arranged with the YKHC medical director, with nurse supervisors and with Alaska Public Health Nursing who interact with CHA/Ps and are familiar with the well child services they provide. In addition, we also discussed the protocols and supervision arrangements with staff of one of the village clinics during a tour of the clinic facilities. The purpose of these discussions was to discern the professional assessment of the care provided by CHA/Ps and the views of medical providers on the role of CHA/Ps in the delivery system. We did not do an independent assessment of the completeness or quality of exams provided by CHA/Ps. Instead we relied on the assessments of the medical professionals who review all exams provided by CHA/Ps.

Without exception, the medical professionals were enthusiastic about the role of the CHA/Ps and the quality of the services they provide. Said one: “For the services they provide, the CHA/Ps do a great job.” There was consensus that if the CHA/Ps were not providing these services, the services would not be provided at all, or they would be provided in a haphazard way. Indeed, the YKHC medical director indicated: “You couldn’t have a better system for the initial level of care, and for referrals.”

A primary issue for a system that relies on non-professionals for service delivery is the possibility that care might be less than optimal in quality. The medical professionals who work with the CHA/Ps were quite confident that the system of training and supervision fully addresses the quality issues. Speaking specifically to the well child exams provided by the

CHA/Ps, the medical director indicated: “The quality of the well child is excellent. The need is being addressed very well by the health aides. And, as they get more experience, they keep getting better.”

Quality is addressed through a structure and system in which a doctor or mid-level practitioner is specifically associated with and speaks with each health aide almost every day. In addition, there is 100% review of medical records and all documentation, including a review of the quality of the exam and the extent and appropriateness of referrals. At least twice a year there is on-site observation by the doctor, in addition to periodic on-site clinical follow-up by staff. The structure was carefully thought out and is rigorously followed. As a result, few problems have emerged. The medical professionals attributed these positive results to the CHA/P training, close oversight and procedures for certification.

## Discussions with Medicaid, Public Health and YKHC Officials

In Bethel and in Juneau, discussions were arranged with Medicaid, Public Health and YKHC officials to discuss the EPSDT pilot project, how it was working and any issues and concerns that have occurred. The discussions highlighted the issues and the process in place to address those issues facilitating continuous learning from experience and providing an opportunity to improve the operation of the pilot over time.

The positive message that emerges from the list below (which was developed with contributions from Medicaid, Public Health and YKHC officials) is that a project of the size, scope and complexity as this one is inevitably will face a number of issues, but that the issues can be addressed in a constructive way.

### Problems and Resolution:

- Some CHPs did not attain requisite skills or wish to participate in the program.
  - ▶ Resolution – Discontinue those providers without the skills or interest in the program.

- High no-show rate for appointments (57% in 1998).
  - ▶ Resolution – Increase community awareness and acceptance of the program through village-based promotional activities.
  
- Lack of integration of hospital-based screens.
  - ▶ Resolution – Initiate workgroup to address problem and integrate tracking system for all children using the RPMS case management module.
  
- Labor intensive management of appointment scheduling.
  - ▶ Resolution – Implement Scheduler to schedule and monitor appointment and generate reports to track scheduled appointments, notify the family, auto generate recall dates for appointments and generate lists for use in the village of children due appointments to ease notification work load.
  
- Lack of integrated tracking systems.
  - ▶ Resolution – Dental clinics had separate tracking system, and optometry used manual systems, which created confusion and additional workload. Referrals were then integrated from all units into the RPMS case management module for referral input, recall dates and generation of reports. YKHC continues to investigate ways to improve the referral process.
  
- Greater awareness of mental health and substance abuse issues evidenced by lack of referrals in these areas.
  - ▶ Resolution – Developed advanced training module in collaboration with behavioral health staff that incorporated child development symptom checklist as an assessment tool. This was incorporated into on-going training and refresher courses.
  
- Overcoming negative attitude of CHPs.

Resolution – In order to overcome a CHP perception of the well child program as just “another thing to do”, the village based promotional activities on the

value of wellness and prevention were expanded. School Health Fairs were organized as a community event that emphasizes the importance of prevention. During 2001-2002, the program attained regional acceptance of the concept of wellness so that both community members and CHPs have recognized the need for well child care. Demand has grown so that EPSDT screens in CY02 are expected to exceed 1500 – more than double the number in 2001.

- Staff turnover.
  - ▶ **Resolution** – Advanced training and career enhancement, as well as a recognition of the inevitability of staff turnover due to burnout, personal issues and retirement are incorporated into program planning and evaluation.

## Findings from Analysis of Medicaid Data

To better understand trends in the YK region that occurred after the introduction of CHA/Ps as providers of preventive health care services for children, we analyzed utilization patterns for selected preventive and other health care services in the YK region between 1998 and 2001. The utilization patterns in the YK region were then compared with utilization patterns for the same services over the same period in another area selected to serve as a “control group.” The comparison area selected was the Bristol Bay region.

Selection of an area to serve as a control group for comparison is always difficult for this type of analysis because it is impossible to control for all of the factors that might contribute to observed differences between the two areas. Overall population, for example, is much smaller in the Bristol Bay region than in the YK. However in many other respects Bristol Bay is similar to the YK region, and it would be expected that utilization of preventive and other services in both regions would be subject to the same general forces (e.g., eligibility policies, outreach efforts, reimbursement and payment policies, etc.). The key fact is that the Bristol Bay region would not reflect the activity of CHA/Ps delivering preventive services for children. In theory, differences in utilization trends between the two areas would therefore be associated with, if not wholly or partly attributable to, the provision of these services by CHA/Ps.

The data on which this analysis is based are drawn from the paid claims files for the Alaska Medicaid program. Therefore, the conclusions are based on how services were billed to and paid by Medicaid.

The analysis is organized around utilization rates for EPSDT services; vision, hearing, and dental services; and all other services. These utilization rates describe the frequency with which these services were provided within certain age groups on a per capita basis in YK and Bristol Bay. The age groups are 0-4, 5-9, 10-14, and 15-20.

## Highlights

The analysis is set forth in the discussion and tables below. Prior to a more detailed discussion, the following summary observations can be made:

- *CHA/Ps became important parts of the provider community during the period from 1998 to 2001.* By 2001, roughly 14% of billed services provided to children on Medicaid in YK were provided by these practitioners. This figure understates the overall role that CHA/Ps have come to play since it excludes services provided by CHAs with level I and II certification that cannot be billed to Medicaid. If these additional services were included, the number would be higher yet. It is clear that these CHA/Ps made significant contributions to the accomplishments described below.
- *The data indicate that the number of health services provided per child in the YK region rose very substantially over the four-year period from 1998 to 2001.* This indicates a significant improvement in access and provision of all types of services (both well child and sick child services) for these children.
- *EPSDT preventive screening services were provided at much higher rates in 2001 than in 1998 in YK.* CHA/Ps provided 21% of EPSDT services delivered in 2001. The rate of EPSDT services greatly surpassed the rate for Bristol Bay. In addition, by 2001, PHNs provided EPSDT services at very high rates to children of age 0-4. This result is likely attributable indirectly to the role of CHA/Ps, as they allowed PHNs the freedom to focus on this group.
- *Services other than EPSDT services were provided at much higher rates in YK in 2001 than in 1998, for all age groups.* This is likely the result of a

number of factors including the expansion of service delivery capacity due to the availability of CHA/Ps in the YK. However, the rates at which vision, hearing, and dental services were provided did not grow and remained quite low.

## Review of Findings

This section focuses on the results of an analysis of utilization of services among children in YK and Bristol Bay between 1998 and 2001. In analyzing these utilization data, we examined the number of services of all types billed to Medicaid; the number of EPSDT services; the number of vision, hearing and dental services; and the number of services other than EPSDT, vision, hearing and dental. We also examined the types of providers rendering these services and the ages of the children receiving the services. The analysis is based on the Medicaid paid claims files for 1998 through 2001.

In this section, the data are sometimes described as “average number of services per child per year.” This is defined as the average number of services per child per full-year equivalent. This accounts for the fact that some children are enrolled for all 12 months in the indicated year, but others are enrolled for one to eleven months. The service utilization is calculated to reflect the number of services as if enrollment were for 12 months.

## Services of All Types

We examined the utilization of services of all types as a way of gaining insight into the general level of health services provided to children in YK and Bristol Bay. The results are shown in Table 2. The data indicate that the number of services of all types provided to YK children per capita grew dramatically between 1998 and 2001, increasing at an annual rate of 18%, compared to an annual rate of growth in Bristol Bay of 6%.

This rapid growth had the effect of closing a significant gap between use rates in YK and Bristol Bay that existed in 1998. In 1998, YK children received only 72% of the number of services provided to Bristol Bay children. By 2001, YK children received 105% of the number of services provided in Bristol Bay.

<b>Table 2.</b> <b>Average Number of Services per Medicaid Enrollee per Year, Ages 0 – 20, 1998 to 2001, for the Yukon-Kuskokwim and Bristol Bay Regions</b>		
<b>Year</b>	<b>YK Region</b>	<b>Bristol Bay Region</b>
1998	11.6	14.8
1999	14.9	14.1
2000	18.6	15.8
2001	18.5	17.5
Average Annual Change	18%	6%

## EPSDT Services, All Ages

We examined the utilization of services coded and billed specifically as EPSDT services. These results appear in Table 3. With respect to EPSDT services, the number of services provided to YK children per year grew by 51% on a per capita basis between 1998 and 2001, while Bristol Bay children received only 6% more services. By 2001, YK children received 75% more services than Bristol Bay children: in YK, the use rate was .42 services per child per year; in Bristol Bay it was .24 services per child per year.

<b>Table 3.</b> <b>Average Number of EPSDT Services per Medicaid Enrollee per Year, Ages 0 – 20, 1998 to 2001, for the Yukon-Kuskokwim and Bristol Bay Regions</b>		
<b>Year</b>	<b>YK Region</b>	<b>Bristol Bay Region</b>
1998	0.278	0.225
1999	0.371	0.289
2000	0.409	0.234
2001	0.420	0.239

Average Annual Change	15%	2%
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## Vision, Hearing and Dental Services

Table 4 shows that vision, hearing and dental services are provided at very low rates in YK compared to Bristol Bay, with use rates that are less than half of those of Bristol Bay. In YK in 2001, on average a child received 3.1 services per year. In Bristol Bay the figure was 6.7 services per year. There is obvious disparity between the regions. This suggests that inadequate service delivery capacity or impediments to effective referrals for these services are more likely in YK.

On the other hand, the use rate for these services grew 31% between 1998 and 2001 in YK, suggesting improvement in the referral process.

<b>Year</b>	<b>YK Region</b>	<b>Bristol Bay Region</b>
1998	2.3	4.7
1999	1.7	3.4
2000	3.3	6.0
2001	3.1	6.7
Average Annual Change	9%	13%

## Other Services

Table 5 shows that services other than EPSDT, vision, hearing and dental grew very rapidly in YK, growing by 20% per capita over the four-year period. (This category of service includes everything other than EPSDT, vision, hearing and dental, including all hospital, physician, laboratory, and transportation services.) Comparable growth in Bristol Bay was 3%. As a result, YK enrollees over the entire age range of 0-20 received an average of 4.4 more services

per year in 2001, whereas they received 0.9 fewer services per person in 1997, compared to children in Bristol Bay.

<b>Table 5.</b>		
<b>Average Number of Other Services per Medicaid Enrollee per Year, Ages 0 – 20, 1998 to 2001, for the Yukon-Kuskokwim and Bristol Bay Regions</b>		
<b>Year</b>	<b>YK Region</b>	<b>Bristol Bay Region</b>
1998	9.0	9.9
1999	12.8	8.8
2000	15.0	9.5
2001	15.0	10.6
Average Annual Change	20%	3%

## Utilization of Services by Age Group

Table 6 displays the utilization rates for all services for YK and Bristol Bay children by age group. These data show that YK children received fewer services per capita than Bristol Bay children in 1998 in all age groups, but that by 2001 YK children in all but the oldest age group (15-20) received more services than Bristol Bay children. This was accomplished through very high rates of growth in utilization at YK, averaging over 15% per year, with the highest rates of growth among the youngest children.

<b>Table 6-1.</b>				
<b>Average Number of Services per Medicaid Enrollee per Year, by Age Group, Yukon- Kuskokwim Region, 1998 - 2001</b>				
<b>Year</b>	<b>Ages 0-4</b>	<b>Ages 5-9</b>	<b>Ages 10-14</b>	<b>Ages 15-19</b>
1998	13.5	9.8	10.4	12.7
1999	19.2	11.6	12.4	16.0
2000	22.8	15.5	16.5	19.3
2001	23.6	14.6	15.3	19.8

Average Annual Change	22%	15%	15%	16%
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<b>Table 6-2. Average Number of Services per Medicaid Enrollee per Year, by Age Group, Bristol Bay Region, 1998 - 2001</b>				
<b>Year</b>	<b>Ages 0-4</b>	<b>Ages 5-9</b>	<b>Ages 10-14</b>	<b>Ages 15-19</b>
1998	16.8	11.9	13.5	18.6
1999	11.3	13.0	15.3	19.7
2000	15.5	12.1	17.2	21.1
2001	19.2	14.3	15.1	25.4
Average Annual Change	9%	7%	4	11%

## Utilization of EPSDT Services by Age Group

Table 7 describes EPSDT utilization by age group in YK and Bristol Bay. A key finding from these data relates to children ages 0 to 4. EPSDT utilization in YK for children of age 0-4 was about the same as in Bristol Bay in 1998. However, in the YK Region EPSDT services per child per year increased by an average of 20% annually, increasing by 69% from 1998 to 2001. On the other hand, the use of EPSDT services in Bristol Bay in this age group remained the same over the 1998-2001 period. By 2001 children ages 0 to 4 in the YK Region were receiving 43% more EPSDT services per child per year compared to children in Bristol Bay.

EPSDT utilization rates among the three older age groups (5-9, 10-14, and 15-20) were similar in both regions over the four-year period. Overall, children in the YK region received slightly higher levels of EPSDT services.

<b>Table 7-1.</b>					
<b>Average Number of EPSDT Services per Medicaid Enrollee per Year, by Age Group, Yukon- Kuskokwim Region, 1998 - 2001</b>					
<b>Year</b>	<b>Ages 0-4</b>	<b>Ages 5-9</b>	<b>Ages 10-14</b>	<b>Ages 15-19</b>	<b>All Ages</b>
1998	.62	.12	.08	.03	.28
1999	.87	.17	.11	.04	.37
2000	1.04	.16	.09	.04	.41
2001	1.04	.17	.13	.06	.42
Average Annual Change	20%	14%	21%	33%	16%

<b>Table 7-2.</b>					
<b>Average Number of EPSDT Services per Medicaid Enrollee per Year, by Age Group, Bristol Bay Region, 1998 - 2001</b>					
<b>Year</b>	<b>Ages 0-4</b>	<b>Ages 5-9</b>	<b>Ages 10-14</b>	<b>Ages 15-19</b>	<b>All Ages</b>
1998	.59	.07	.06	.01	.23
1999	.69	.16	.12	.02	.29
2000	.62	.08	.05	.02	.23
2001	.59	.12	.10	.03	.24
Average Annual Change	1%	45%	46%	41%	4%

The standard measures of EPSDT performance are the screening ratio and participant ratio. These measures are calculated for federal reports (and the statewide values were discussed in an earlier section on pages 3 – 5 of this report.)

For this analysis, screening and participant ratios were calculated specifically for the YK and Bristol Bay regions, and they are displayed in Table 7-3 for 1998 and 2001.

<b>Table 7-3.</b>						
<b>Screening and Participant Ratios for 1998 and 2001, for Yukon- Kuskokwim Region, Bristol Bay Region, and the State of Alaska</b>						
<b>Measure</b>	<b>Bristol Bay 1998</b>	<b>Bristol Bay 2001</b>	<b>YK Region 1998</b>	<b>YK Region 2001</b>	<b>SoA 416 Data 1998</b>	<b>SoA 416 Data 2001</b>
Screening Ratio: All Ages	.16	.21	.21	.31	.37	.60

By Age: <b>to age 1</b>	.28	.30	.20	.47	.50	1.03
1-5	.24	.24	.31	.44	.36	.54
6-20	.10	.18	.15	.23	.21	.38
Participant Ratio: All Ages	.09	.10	.14	.19	.31	.50
By Age: <b>to age 1</b>	.36	.38	.36	.53	.66	.82
1-5	.15	.14	.23	.32	.30	.54
6-20	.03	.06	.05	.09	.20	.38

The screening and participant ratios for 1998 and 2001 for the two regions confirm the improvement in EPSDT performance that occurred in the YK region since 1998, especially among the younger children. The most dramatic improvements in EPSDT performance occurred among infants ages 0-1 in the YK region, where the screening ratio increased from .20 to .47 and the participant ratio increased from .36 to .53. By comparison, in Bristol Bay the screening ratio increased only from .28 to .30 for this age.

In both Bristol Bay and in the YK Region, for schools age children, the screening rates and participant rates increased at a similar pace from 1998 to 2001. In each region the screening ratio increased by 8 percentage points. The participant ratio showed significant improvement in both areas, though the ratios remained relatively small.

Several points need to be made based on these data. First, it is noteworthy that the dramatic increase in EPSDT screening services for children ages 0 – 4 probably coincided with the advent of Denali KidCare, increased enrollment, and PHNs continuing to put significant energy into EPSDT. Many experts regard EPSDT services for the very youngest children to be most critical, and the resulting large increase in services for this group is a very significant finding of this study.

A second point relates to the overall utilization of EPSDT screening services illuminated by these data. The use of EPSDT screening as measured by the Medicaid paid claims file suggests that the actual use of these services is low, and there is considerable distance to go before the use of well child exams approaches the desired level. In these remote areas, the screening rates and participant rates remain below statewide averages, for all ages. However,

the use of CHA/Ps for EPSDT services in the YK Region was associated with a significant increase in the overall delivery of EPSDT services, and performance improved for all age groups.

## Vision, Hearing and Dental Services by Age Group

Table 8 shows that the lower rates of utilization of these services at YK is uniform for all age groups, compared to utilization of these services in Bristol Bay. Some experts regard use rates for these services as important indicators of the capacity of the delivery system, the availability of providers of these services, and the effectiveness of referral systems. The relatively low rates of hearing, vision and dental services utilization in the YK Region compared to Bristol Bay suggest that access to these providers is a more significant issue in the YK Region. Progress was made over this period, but the data indicate that access to these services is a significant issue in the YK region.

<b>Table 8-1.</b>				
<b>Average Number of Vision, Hearing and Dental Services per Medicaid Enrollee per Year, by Age Group, Yukon- Kuskokwim Region, 1998 - 2001</b>				
<b>Year</b>	<b>Ages 0-4</b>	<b>Ages 5-9</b>	<b>Ages 10-14</b>	<b>Ages 15-19</b>
1998	1.5	2.9	3.2	1.7
1999	1.5	1.9	1.9	1.7
2000	1.9	3.9	4.4	3.0
2001	2.2	3.5	3.8	2.9
Average Annual Change	14%	20%	26%	23%

<b>Table 8-2.</b>				
<b>Average Number of Vision, Hearing and Dental Services per Medicaid Enrollee per Year, by Age Group, Bristol Bay Region, 1998 - 2001</b>				
<b>Year</b>	<b>Ages 0-4</b>	<b>Ages 5-9</b>	<b>Ages 10-14</b>	<b>Ages 15-19</b>
1998	3.8	5.4	5.2	4.8
1999	4.7	6.9	8.6	5.3
2000	3.6	6.8	8.2	6.0
2001	4.8	7.4	7.9	6.9
Average	11%	12%	19%	13%

Annual Change				
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## Other Services by Age Group

Table 9 shows that, in contrast to the use rates for vision, hearing, and dental services, the use rates for all other services in the YK Region in 2001 were substantially higher than at Bristol Bay among all age groups but the oldest, and increased significantly over the period from 1998 to 2001. Use rates in the YK for these services were below those in Bristol Bay in 1998 except for ages 5 - 9, but were higher by 2001. Use rates for these services at Bristol Bay during the 1998 to 2001 period rose slightly.

<b>Table 9-1.</b>				
<b>Average Number of "Other" Services per Medicaid Enrollee per Year, by Age Group, Yukon- Kuskokwim Region, 1998 - 2001</b>				
<b>Year</b>	<b>Ages 0-4</b>	<b>Ages 5-9</b>	<b>Ages 10-14</b>	<b>Ages 15-19</b>
1998	11.3	6.9	7.1	11.0
1999	16.8	9.6	10.4	14.2
2000	19.8	11.4	12.0	16.2
2001	20.4	11.0	11.0	16.9
Average Annual Change	23%	18%	19%	16%

<b>Table 9-2.</b>				
<b>Average Number of "Other" Services per Medicaid Enrollee per Year, by Age Group, Bristol Bay Region, 1998 - 2001</b>				
<b>Year</b>	<b>Ages 0-4</b>	<b>Ages 5-9</b>	<b>Ages 10-14</b>	<b>Ages 15-19</b>
1998	12.3	6.5	8.3	13.7
1999	10.4	6.0	6.5	14.4
2000	11.2	5.2	9.0	15.1
2001	13.8	6.7	7.2	18.5
Average Annual Change	5%	3%	-1%	11%

## The Role of CHA/Ps in the Delivery of EPSDT Services in the YK Region

Since 1998, when Medicaid policy first allowed the provision and billing of services by CHA/Ps, their role has increased significantly. As Table 10 shows, by 2001 CHA/Ps were providing 14% of all services billed to Medicaid in the region, including 21% of all EPSDT services. This can only be regarded as a significant and positive expansion of service delivery capacity in a region that is characterized by shortages of providers and great challenges to access and service delivery.

<b>Year</b>	<b>CHA/Ps</b>	<b>All Providers</b>	<b>CHA/P Services as % of All Services</b>
1998	1,442	59,337	2.4%
1999	7,798	88,930	8.8%
2000	17,369	121,261	14.3%
2001	17,812	127,580	14.0%

<b>Year</b>	<b>CHA/Ps</b>	<b>All Providers</b>	<b>CHA/P Services as % of All Services</b>
1998	73	1418	5.1%
1999	84	2207	3.8%
2000	298	2660	11.2%
2001	600	2899	20.7%

<b>Table 12.</b>					
<b>Total Number of EPSDT Services Provided to Children, by Age Group, by CHA/P Providers in the Yukon- Kuskokwim Region, 1998 to 2001</b>					
<b>Year</b>	<b>Ages 0-4</b>	<b>Ages 5-9</b>	<b>Ages 10-14</b>	<b>Ages 15-19</b>	<b>Total</b>
1998	4	35	24	10	73
1999	15	55	25	3	84
2000	100	93	86	19	298
2001	157	245	185	57	600

As indicated in Tables 11 and 12, CHA/Ps have contributed significantly to the increase in the number of EPSDT screening services provided in the YK Region from 1998 to 2001. Notably, the contribution is spread across the age distribution, including children ages 0 to 4. The largest impact was among children ages 5 to 9, and also ages 10 to 14.

The progression of increases in the number of EPSDT screenings suggests that it takes time to train CHA/Ps in the provision of EPSDT well child services, and for service delivery to begin and be reflected in the screening counts. However, by 2001 the number of CHA/P screenings was beginning to make a significant impact on the number of screenings provided in the YK Region.

It is also evident that the line of demarcation is not clear in defining the responsibility for pre-school age children with PHNs and for older children with CHA/Ps. PHNs continue to be the mainstay of EPSDT delivery, providing 1,400 (or 48%) of the 2,899 total EPSDT services provided by all providers in 2001. Of this number, 97 were for children ages 5 to 20. At the same time, CHA/Ps are providing EPSDT services for younger children ages 0 to 4. Of the 600 EPSDT screens provided by these providers, 157 (or 26%) were EPSDT screenings for younger children ages 0 to 4. It is important to note several points here. First, neither age group is off limits to the other provider. Second, provider access has been increased for all children in the YKHC service area.

## Observations and Conclusions

We are able to offer several observations with regard to the YKHC EPSDT pilot program, particularly with respect to the possibility of expanding this approach to other parts of the state.

First, the need for careful planning for program implementation is clearly evident from this assessment. The introduction and integration of a new class of providers is an extremely complex proposition and success depends heavily upon anticipating and resolving the issues that will arise in any such undertaking.

Second, the results of fundamental delivery system changes, such as this one, are not likely to be seen immediately. Based on this particular case, meaningful changes in the patterns of utilization will not appear for at least a few years.

Third, the effectiveness of CHA/Ps with respect to EPSDT in a given village appears to depend heavily on the adequacy of resources to address acute, rather than preventive, services. It is to be expected that resources will always be diverted first to acute care needs, and if other providers are not available, CHA/Ps will be obliged to apply their time and energy to those needs rather than preventive services. Therefore, the means by which EPSDT-related needs are to be met in a given village cannot be separated from the means by which more acute needs are addressed.

Fourth, the overall effectiveness of CHA/Ps with respect to EPSDT in a given village appears to depend heavily on the availability of support from regional centers and the degree of the CHA/Ps' integration with the larger delivery system. The CHA/P operates as part of a larger, well-organized team of providers. It is apparent that a system of care built around CHA/Ps must address and resolve the challenges posed by organizational isolation of the practitioner.

Finally, the long-term acceptability of a system of care that relies upon CHA/Ps clearly depends upon a program of continuous training and support. High rates of attrition and turnover among CHA/P staff suggest that the role of the CHA/P is a very demanding one. Long-term success will require continuous investment of resources into systems of training and other forms of support for this difficult clinical position.

Nevertheless, the YKHC EPSDT pilot program is an innovative and resourceful approach to a difficult problem in the delivery of the Medicaid well child health screening service in a bush region of Alaska. The program offers services by lay providers who are specially trained and carefully supervised by medical professionals. The result is the provision of services that would not otherwise be available in the region. The outcome no doubt is the earlier detection of medical problems that otherwise would have been undetected and untreated until a much later time. This study has concluded that the services are of high quality, that a good system is in place to supervise and monitor the delivery of the health care services the CHA/Ps provide, and that the CHA/Ps have in fact expanded the capacity of the health care delivery system of the YKHC, allowing the medical professionals to focus on the more difficult and acute medical concerns while relying on the system of CHA/Ps to be the front line of the delivery system in the villages.

We found no reason to be concerned about the delivery of well-child care by CHA/Ps. The medical professionals, from the YKHC medical director, to the mid-level practitioners in the village clinics, to the leadership of Public Health Nursing for Alaska, were uniform in their positive assessment of the work of the CHA/Ps and the contribution they make in providing preventive as well as sick and trauma care. We heard many times, from every level of medical professional, that within the scope of what they are trained to do, the CHA/Ps do an excellent job.

The data also show that the CHA/Ps have contributed to a significant increase in the number of screenings provided and an increase in the likelihood that an eligible child will receive EPSDT services.

The experience of the YKHC is instructive for other regions that might undertake a similar effort. The YKHC experience indicates that the development of the systems and the capacity to deliver these services takes time and requires an organizational shift toward prevention and a wellness model from the traditional Indian Health Service sick care model. It requires a paradigm shift much like the shift that occurred for Public Health Nursing in 1991 as a result of OBRA expansion when EPSDT and Pregnant Women's Medicaid expansions outstripped PHN capacity by actively assisting families to get into a routine source of medical care in most or the urban or small town communities. However, the YKHC experience also shows the positive impact of a total commitment to this approach, and that success can be achieved in the relatively brief span of just two or three years.

Appendix A: MEDICAID and EPSDT

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## MEDICAID and EPSDT

The **Early and Periodic Screening, Diagnostic, and Treatment (EPSDT)** service is Medicaid's comprehensive and preventive child health program for individuals under the age of 21. EPSDT was defined by law as part of the Omnibus Budget Reconciliation Act of 1989 (OBRA 89) legislation and includes periodic screening, vision, dental, and hearing services. In addition, section 1905(r)(5) of the Social Security Act (the Act) requires that any medically necessary health care service listed at section 1905(a) of the Act be provided to an EPSDT recipient even if the service is not available under the State's Medicaid plan to the rest of the Medicaid population.

The EPSDT program consists of two mutually supportive, operational components: *(1) assuring the availability and accessibility of required health care resources; and (2) helping Medicaid recipients and their parents or guardians effectively use these resources.* These components enable Medicaid agencies to manage a comprehensive child health program of prevention and treatment, to seek out eligibles and inform them of the benefits of prevention and the health services and assistance available and to help them and their families use health resources, including their own talents and knowledge, effectively and efficiently. It also enables them to assess the child's health needs through initial and periodic examinations and evaluations, and also to assure that the health problems found are diagnosed and treated early, before they become more complex and their treatment more costly.

### **Periodicity Schedule**

Periodicity schedules for Periodic Screening, Vision, and Hearing services must be provided at intervals that meet reasonable standards of medical practice. States must consult with recognized medical organizations involved in child health care in developing reasonable standards.

Dental services must be provided at intervals determined to meet reasonable standards of dental practice. States must consult with recognized dental organizations involved in child health care to establish those intervals. A direct dental referral is required for every child in accordance with each state's periodicity schedule and at other intervals as medically necessary. The periodicity schedule for other EPSDT services may not govern the schedule for dental services. It is expected that older children may require dental services more frequently than physical examinations.

**The EPSDT benefit, in accordance with section 1905(r) of the Act, must include the following services:**

**Screening Services** -- Screening services must include all of the following services:

- **Comprehensive health and developmental history** -- (including assessment of both physical and mental health development);
- **Comprehensive unclothed physical exam;**

- **Appropriate immunizations** -- (according to the schedule established by the Advisory Committee on Immunization Practices (ACIP) for pediatric vaccines);
- **Laboratory tests** -- Identify as statewide screening requirements the minimum laboratory tests or analyses to be performed by medical providers for particular age or population groups;

Lead Toxicity Screening - All children are considered at risk and must be screened for lead poisoning. HCFA requires that all children receive a screening blood lead test at 12 months and 24 months of age. Children between the ages of 36 months and 72 months of age must receive a screening blood lead test if they have not been previously screened for lead poisoning. A blood lead test must be used when screening Medicaid-eligible children. A blood lead test result equal to or greater than 10 ug/dl obtained by capillary specimen (fingerstick) must be confirmed using a venous blood sample.

At this time, States may not adopt a statewide plan for screening children for lead poisoning that does not require lead screening for all Medicaid-eligible children.

- **Health Education** -- Health education is a required component of screening services and includes anticipatory guidance. At the outset, the physical and/or dental screening provides the initial context for providing health education. Health education and counseling to both parents (or guardians) and children is required and is designed to assist in understanding what to expect in terms of the child's development and to provide information about the benefits of healthy lifestyles and practices as well as accident and disease prevention;
- **Vision Services** -- At a minimum, include diagnosis and treatment for defects in vision, including eyeglasses. Vision services must be provided according to a distinct periodicity schedule developed by the state and at other intervals as medically necessary;
- **Dental Services** -- At a minimum, include relief of pain and infections, restoration of teeth and maintenance of dental health. Dental services may not be limited to emergency services. Although an oral screening may be part of a physical examination, it does not substitute for examination through direct referral to a dentist. A direct dental referral is required for every child in accordance with the periodicity schedule developed by the state and at other intervals as medically necessary. The law as amended by OBRA 1989 requires that dental services (including initial direct referral to a dentist) conform to the state periodicity schedule which must be established after consultation with recognized dental organizations involved in child health care;
- **Hearing Services** -- At a minimum, include diagnosis and treatment for defects in hearing, including hearing aids; and
- **Other Necessary Health Care** -- Provide other necessary health care, diagnosis services, treatment, and other measure described in section 1905(a) of the Act to correct or ameliorate defects, and physical and mental illnesses and conditions discovered by the screening services.

**Diagnosis** -- When a screening examination indicates the need for further evaluation of an individual's health, provide diagnostic services. The referral should be made without delay and follow-up to make sure that the recipient receives a complete diagnostic evaluation. If the recipient is receiving care from a continuing care provider, diagnosis may be part of the screening and examination process. States should develop quality assurance procedures to assure comprehensive care for the individual.

**Treatment** -- Health care must be made available for treatment or other measures to correct or ameliorate defects and physical and mental illnesses or conditions discovered by the screening services.

**Lead Poisoning Prevention** -- Screening for lead poisoning is a required component of an EPSDT screen. Current HCFA policy requires a screening blood lead test for all Medicaid-eligible children at 12- and 24-months of age. In addition, children over the age of 24 months, up to 72 months of age, should receive a screening blood lead test if there is no record of a previous test. Any additional diagnostic and treatment services determined to be medically necessary must also be provided to a child diagnosed with an elevated blood lead level.

#### **State Medicaid Agency required activities**

- States must inform all Medicaid-eligible persons under age 21 that EPSDT services are available.
- States must set distinct periodicity schedules for screening, dental, vision, and hearing services.
- States must report EPSDT performance information annually (HCFA Form-416). The authority for requiring states to submit the annual report is section 1902(a)(43) of the Social Security Act (the Act). Each state must report annually for each Federal fiscal year if they administer or supervise the administration of an approved plan for a Federally aided title XIX program. The statute requires that states provide us with the following: (1) the number of children provided child health screening services, (2) the number of children referred for corrective treatment, (3) the number of children receiving dental services, and (4) the state's results in attaining goals set for the state under section 1905(r) of the Act. The form HCFA-416 was developed to collect this information.

**The annual EPSDT report (Form HCFA-416)** provides basic information on participation in the Medicaid child health program. The information is used to assess the effectiveness of State EPSDT programs in terms of the number of children (by age group and basis of Medicaid eligibility), who are provided child health screening services, are referred for corrective treatment, and the number receiving dental services. Child health screening services are defined for purposes of reporting on this form as initial or periodic screens required to be provided according to a state's screening periodicity schedule.

**EPSDT CPT-4 codes: Preventive Medicine Services**

99381 New Patient under one year  
99382 New Patient (ages 1-4 years)  
99383 New Patient (ages 5-11 years)  
99384 New Patient (ages 12-17 years)  
99385 New Patient (ages 18-39 years)  
99391 Established patient under one year  
99392 Established patient (ages 1-4 years)  
99393 Established patient (ages 5-11 years)  
99394 Established patient (ages 12-17 years)  
99395 Established patient (ages 18-39 years)  
99431 Newborn care (history and examination)  
99432 Normal newborn care

or

**CPT-4 codes: Evaluation and Management Codes**

99201-99205 New Patient  
99211-99215 Established Patient

Appendix B: The Alaska EPSDT Rules

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## The Alaska EPSDT Rules

### 7 AAC 43.452. EPSDT PROGRAM.

- (a) A Medicaid recipient under 21 years of age is eligible for the early periodic screening, diagnosis, and treatment program (EPSDT).
- (b) Subject to AS 47.05, AS 47.07, and this chapter, the division will reimburse for an EPSDT screening that is provided to an eligible recipient by an enrolled health care provider in accordance with the periodicity schedules in (d) - (f) of this section. An EPSDT screening includes
  - (1) a health and developmental history;
  - (2) an unclothed physical examination, including a head-to-toe systemic review;
  - (3) a dental screening and, beginning at age three or at an earlier age if medically necessary, referral to a dentist for a dental examination;
  - (4) a vision screening and, beginning at age five or at an earlier age if medically necessary, referral to a vision care services provider for a vision examination;
  - (5) a hearing screening and, if medically necessary, referral for diagnosis and treatment of defects in hearing;
  - (6) a developmental assessment, including gross and fine motor development, communication skills or language development, self-help and self-care skills, and social-emotional development;
  - (7) a determination of immunization status and administration of immunizations in accordance with the most current version of the *Recommended Childhood Immunization Schedule* approved by the Advisory Committee on Immunization Practices (ACIP);
  - (8) a determination of nutritional status;
  - (9) health-related measurements, including height, weight, blood pressure, and other appropriate measures and indicators of health;
  - (10) hemoglobin or hematocrit testing at the ages of nine months, four years, eight years, and eighteen years unless more frequent testing is medically necessary;
  - (11) other tests and procedures that are age appropriate and medically necessary, including urinalysis, pap smears, and pelvic examinations;

- (12) an intradermal purified protein derivative (PPD) skin test for tuberculosis at the ages of one year, three years, five years, and 12 years;
- (13) a referral to the Women, Infants, and Children (WIC) program established under 42 U.S.C. 1786 of a recipient does not already participate in the program and is under age five or pregnant; and
- (14) referrals to other medical providers and programs, as appropriate to the recipient's age and condition. (c) Subject to AS 47.05, AS 47.07, and this chapter, the following enrolled providers will be reimbursed for EPSDT screenings:
  - (1) a physician;
  - (2) a licensed or certified health care practitioner who performs a screening under the supervision of an enrolled physician, if the health care practitioner may perform screenings under the health care practitioner's licensed or certified scope of practice;
  - (3) the division of public health in the department;
  - (4) the United States Indian Health Service or a hospital or clinic operated by a tribal organization, as defined in 25 U.S.C 450b(1), under a funding agreement under 25 U.S.C. 450 - 458aaa (Indian Self-Determination and Education Assistance Act) as amended by P.L. 106-260 (Tribal Self-Governance Amendments of 2000);
  - (5) a licensed advanced nurse practitioner;
  - (6) a rural health clinic that meets the requirements of 7 AAC 43.850;
  - (7) a municipal health department;
  - (8) a school district;
  - (9) a federally qualified health center that meets the requirements of 7 AAC 43.870. (d) The periodicity schedule for an EPSDT screening is as follows, with additional screenings performed as medically necessary:
    - (1) beginning at birth through age two, nine screenings performed at the following ages:
      - (a) between birth and three weeks;
      - (b) two months;

- (c) four months;
  - (d) six months;
  - (e) nine months;
  - (f) 12 months;
  - (g) 15 months;
  - (h) 18 months;
  - (i) 24 months;
- (2) beginning at three years of age through six years of age, annual screenings;
- (3) beginning at seven years of age through 20 years of age, biennial screenings. (e) The periodicity schedule for dental examinations by a dentist is biannual examinations beginning at age three, with earlier or more frequent examinations performed as medically necessary. (f) The periodicity schedule for vision examinations by a vision care provider is an annual examination beginning at age five, with earlier or more frequent examinations performed as medically necessary (g) Notwithstanding other reimbursement provisions in this chapter, the division will reimburse an enrolled provider for preventive medicine evaluation and management of infants, children, and adolescents at the rate identified in the fee schedule established under 7 AAC 43.108 for physicians. (h) Any medically necessary service specified as a covered service in this chapter and recommended as a result of an EPSDT screening is Medicaid reimbursable. (Eff. 12/31/92, Register 124; am 12/31/94, Register 132; readopt 8/7/96, Register 139; am 3/3/01, Register 157)

Authority: AS 47.05.010 AS 47.07.030 AS 47.07.040

Editor's Note: The *Recommended Childhood Immunization Schedule* approved by the Advisory Committee on Immunization Practices (ACIP) can be obtained from the Centers for Disease Control and Prevention, 1600 Clifton Road, Atlanta, Georgia 30333.