Health care delivery for Alaska Natives: A brief overview

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ABSTRACT

Objectives. Describe the Alaska Native Health Care delivery system and some of the historical elements that shaped it. Study Design. Retrospective program review. Methods. Retrospective review of existing administrative and clinical programs. Results. Over the last 10,000 -15,000 years the Alaska Native Health System developed from a traditional tribal based self-care system to a complex system that is interdependent on local, state, federal, and private insurance payers. The Alaska Tribal Health System takes an intentional approach to planning. While the system may face an uncertain future, it is poised to continue to remarkable success. The regional health corporations are the backbone of the system and it is the regional health corporations that own the Alaska Tribal Health System. In addition, it is the Alaska Tribal Health System that is responsive to the needs and priorities of the regional health corporations and their Native constituents. The spirit of the Alaska Native has inspired their health care providers at all levels to develop innovative "work arounds" to provide state of the art care through regionalization and telemedicine. Despite the many challenges ahead, the Alaska Tribal Health System will continue to strive to increase the health of Alaska Native people to the highest status possible. Conclusion. The Alaska Native health care system is a dynamic system administered by and for Alaska Native peoples. This system has risen to many challenges in the past and has made great strides through both ingenuity and necessity.

Keywords: Alaska Native, Heath care delivery, Tribal governance, innovation

Here is a headline from our local health care newsletter that sums up key elements of the health care delivery for Alaska Natives:

"Family practitioner, telemedicine help save Kotzebue woman’s life"
Mukluk Telegraph September 2003 Vol. 6, No. 5

The article relates the story of a woman who presented to a remote hospital with a life threatening hemorrhage. The Maniilaq Health Center in Kotzebue doesn’t have an operating room, or a surgeon, or anesthesia. Due to weather conditions there was no way to Medevac her to a larger facility. The local health provider had some surgical skills, but he needed assistance. The field-based provider called the Medical Director, Women’s Health at the Anchorage Native Primary Care Center at the Alaska Native Medical Center (ANMC). An Anchorage-based Family Physician at the ANMC Primary Care Center familiar with telemedicine capabilities contacted staff at the Alaska Federal Health Care Access Network so that video teleconferencing could be used for this clinical emergency. The equipment was set up so that the specialist in Anchorage, via satellite, could view real-time images of the surgery in Kotzebue. Still another Women’s Health physician relayed instructions to the Kotzebue team by telephone. The surgery was a success and the patient did well.

The new telemedicine technology was very helpful, but it was also the "can do" attitudes at each level of a highly functional regionalized
health care system that made this patient’s outcome a success. This may have been the first remote video-guided abdominal surgery, but there have been other successful episodes when serious life-threatening emergencies have been managed by "work arounds" with phone, fax, or other telemedicine modalities. It is the Alaska Native health care system’s ability to adapt to adversity that has helped Alaska’s people survive for more than 10,000 years.

Here is some background
Alaska Natives have had a strong cultural heritage to provide health care since they arrived on the North American continent many thousands of years ago. The system we see today has been most heavily shaped by influences that began in the 1950’s, after the US federal response to tuberculosis pandemic. Over the last 10,000 - 15,000 years the Alaska Native Health System developed from a traditional tribal based self-care system to a complex system that is interdependent on local, state, federal, and private insurance payers administered by Alaska Natives themselves. (Appendix I)

Who do we serve?
The Alaska Tribal Health System serves about 125,000 Alaska Natives statewide. We served 86,000 in 1990. Our Alaska Native patients represent approximately one out of every six Alaskans. Approximately 31,000 live in the Anchorage bowl and approximately 7,000 in Fairbanks area. Approximately 87,000 Alaska Natives live in rural communities.

There are twelve non-profit regional health organizations, which are authorized by tribal government resolutions and overseen by Native boards of directors (Figure 1). Some are small, representing six or seven tribes, serving about 2,000 beneficiaries. Other regional health corporations are larger, representing as many as 50 tribes, serving about 20,000 beneficiaries. These 12 "unaffiliated" tribes provide community-based regional health programs.

The regional health corporations are the backbone of the system and it is the regional health corporations that own the Alaska Tribal Health System. In addition, it is the Alaska Tribal Health System that is responsive to the needs and priorities of the regional health corporations and their Native constituents.

How is the health care delivery organized?
The delivery system is based on a hub-and-spoke pattern of regional care (Figure 2). The foundation of the care delivery system is located in the areas where our clients live, i.e., villages and urban community-based clinics.

- Village-based services: Community Health Aide/Practitioner working in a rural village-based clinic
- Subregional services (some regions): Mid-level practitioner serving several villages
- Regional services: Referral hospital or physician health center
- Statewide services: Alaska Native Medical Center
- Contract Health Services: for private sector referrals

As health care delivery encompasses much more than acute medical care, the Alaska Tribal Health System provides extensive related services. Examples of those services are: community sanitation facility construction; health facility construction renovation; staff quarters construction; and solid waste system development. In many cases, the Indian Health Service (IHS) and other agencies e.g., federal Denali Commission, provide funding through the Alaska Native Tribal Health Consortium for those services.

There is also external agency support for some of the sanitation facilities. IHS provides a conduit for transferring sanitation facility construction contributions from Environment Protection Agency; State of Alaska; Housing and Urban Development, Rural Development, and other sources to Alaska Native Tribal Health Consortium (AN-THC). Total sanitation revenues from all sources for Fiscal Year 2003 were approximately $50 million. Despite this, the unmet need is estimated to be $600 million to $1 billion.
### Table 1. What are some of the clinical challenges?

| The leading causes of death include: | The leading causes of outpatient visits include: | The leading causes of hospitalization include: |
|-------------------------------------|-----------------------------------------------|-----------------------------------------------|
| Cancer                             | Upper respiratory                             | Obstetric deliveries                           |
| Unintentional injuries, including water transport/drowning | Unintentional/intentional injuries             | Unintentional injuries                         |
| Heart disease                      | Otitis Media                                  | Pneumonia                                      |
| Suicide                            | Medical/Surgical follow-up                    | Pregnancy complications                        |
| Alcohol related disease            | Bone and joint disorders                      | Arthritis                                      |
| Cerebrovascular disease            | Neurosis/other non-psychotic disorders        | Heart disease                                  |
| Chronic lung disease               | Hypertension                                  | Bronchitis/emphysema                           |
| Influenza and pneumonia            | Immunization                                  | Alcohol abuse                                  |
| Homicide and legal intervention    | Prenatal care                                 | Cancer                                         |
| Chronic liver disease              |                                               |                                               |
| Diabetes                           |                                               |                                               |

### What are some of the clinical challenges?

The leading causes of death include: cancer, unintentional injuries, including water transport/drowning, and heart disease. (Table I) The leading causes of outpatient visits include: upper respiratory infection, unintentional/intentional injuries and otitis media. (Table I) The leading causes of hospitalization include: obstetric deliveries, unintentional injuries, and pneumonia. (Table I)

### Are other resources available for health care delivery?

IHS/tribal health programs are considered payers of last resort. Many Alaska Natives are eligible for Medicare, Medicaid, private insurance, Veterans Affairs, and use these benefits first. Alaska Native tribal health providers can bill these benefit programs. Those funds represented approximately 25% of total system revenues in 2003.

The IHS also funds tribal community health initiatives including injury prevention; immunizations; health research activities; environmental health inspections; health promotion/disease prevention; Community Health Aide/Practitioner program; dental; substance abuse, and health professional recruitment.

### What does Tribal ownership mean?

In Alaska, 99% of all IHS funding and programs have now been transferred to tribal ownership and management. Tribal ownership means there is local priority setting and budget allocation. There is also local decision-making concerning administration, culturally relevant health programs, and health providers.

### Are there limitations to IHS funding?

Yes, IHS does not cover all Native health care. IHS funding levels restrict certain services. The most acute unmet needs include: adult dental care, skilled nursing care, rehabilitation, substance abuse treatment, and high-cost complex medical treatment.

### What are some of the health care challenges?

The tribal organizations and their owners, our patients, need to assure support of their elected congressional officials to maintain and augment core health services funding. Replacement of aging/inadequate hospitals and health centers is an important issue, especially considering the long lag time between statement of need and implementation. There are also operating inefficiencies inherent to maintaining a decentralized health system. The remote setting makes the supply/retention of health professionals a constant challenge. Our constituents want to emphasize prevention. Unfortunately, it is difficult to obtain reimbursement for preventive services.

The Native population is increasing approximately 3.8% year, which continues to be high compared to US all races. There has also been a demographic shift to an aging/elderly Native pop-
ulation with chronic disease. The high costs of medical technology and pharmaceuticals continue to outstrip funding. In addition, there are increasing regulations and increased compliance and information/technology requirements costs.

The unique Alaskan geography requires substantially higher costs of providing services in small isolated rural communities. These far-flung communities have costs that are 50%+ higher than in Anchorage for transportation, freight, heating, supplies, groceries, and other costs of living.

**How to meet the challenges? Future initiatives**

The Alaska Tribal Health System has placed priorities on safe water, sanitation systems, and to improve basic infrastructure. There has been a systematic enhancement of Community Health Aide and village clinic services. There continue to be significant enhancement to adult dental care in Anchorage and rural villages. In addition, Tribal providers seek to educate clients with comprehensive health education/health promotion initiatives. There will be continued replacement and renovation of village primary care facilities, health centers, and two hospitals. There will be statewide development of financial and clinical systems, e.g., Business Office, Information Technology Department, etc. to meet increasing compliance needs.

Tribal providers have partnered with state and local agencies to combat domestic violence and child abuse prevention. There continue to be innovative approaches to improve the medical evacuation system. Development of elderly health services and more long-term care alternatives will require a combination of non-traditional funding approaches plus local community support.

Last, but not least, there needs to be significant enhancement of Alaska Native health research so that Alaska Natives can be true partners in discovering ways to improve their health.

**Sustained telehealth/telemedicine network**

The Alaska Federal Health Care Access Network (AFHCAN), a partnership of a multidisciplinary group of agencies, seeks to broaden the scope of telehealth throughout Alaska to reflect on innovative clinical and technical telehealth applications in both national and international settings. AFHCAN has fostered grassroots applications of telehealth based on regional care that begins in the villages and follows the hub-and-spoke paradigm (Figure 2). The Alaska Native Tribal Health Consortium manages the AFHCAN system.

AFHCAN has been recognized as a successful innovator in telehealth. AFHCAN was awarded the Grace Hopper Technology Leadership Award and a United States Department of Agriculture $500,000 grant. In 2004, AFHCAN received the American Telehealth Association President’s Award. AFHCAN has given multiple presentations, invited talks, publications, and press releases and been spotlighted on "National Public Radio" and "Good Morning America".

AFHCAN seeks to reflect those benefits to increase the health status of Alaska Natives. To further those purposes AFHCAN coordinated the "Innovation and Evaluation 2004: An International Telehealth Conference."

The purpose of the conference was to share ideas, experiences, and lessons learned, plus best practices in telehealth development and delivery. The conference began with a focus on the challenges and successes of telemedicine in Alaska, particularly those of AFHCAN. Following the theme of the conference, "local to global", the scope broadened to a national perspective on telehealth evaluation with a focus on methodologies, and both single and multi-program evaluations. The scope then shifted to reflect innovative clinical and technical telehealth applications in both national and international settings. The conference had Russian interpretation available for all keynote talks and some presentations.

**The beginnings**

To understand the current Alaska Tribal Health System, one should examine its origins. From 1955 – 1970 the Indian Health Service, a branch of the US Public Health Service, provided health care services to all Alaska Natives. IHS operated six hospitals and a statewide community health
program in Alaska from 1955 through the 1990s.

In 1968, the Alaska Native Health Board (ANHB) was organized. It guided health care and research policy, but did not provide direct care. In 1970, the Yukon-Kuskokwim Health Corporation and Norton Sound Health Corporation were organized as non-profit health care entities. In 1971 the Alaska Native Claim Settlement Act was passed, which mandated 13 regional profit corporations. Subsequently each region developed non-profit health care and social service entities.

In 1974, the Alaska Federation of Natives endorsed the "Alaska Native Health Care" policy. The statement was a plan for Native ownership of the entire Alaska Native health system. In 1976, the US Congress passed the Indian Self-Determination and Education Assistance Act, which formalized a process for local control of health care policy and resources. From 1976–1994 regional non-profit organizations/health corporations grew and matured, providing direct and indirect health care through subcontracts with outside health care providers.

In 1992, ANHB defined a 10-year vision statement that recommended Native management of Alaska Native Medical Center and formed workgroups to develop strategies for implementation. In 1994, a joint IHS/ANHB planning forum recommended that a statewide inter-tribal consortium should manage ANMC and most of the functions of the Alaska Area Office. Also in 1994, there was approval of the Alaska Tribal Health Compact, which allowed for eventual assumption of health care delivery within the framework of federally funded programs.

From 1995–1997, IHS and Alaska Native Tribal non-profit organizations developed Continuing Service Agreements. As programs were assumed by the Tribal non-profit organizations, federal staffing of the Alaska Area office was downsized by 100 individuals.

From 1995–1997, ANHB facilitated planning for a consortium comprised of representatives from all the regional tribal non-profit corporations to manage both ANMC and large portions of direct statewide health care delivery. In May 1997, a new ANMC opened, replacing the old hospital building that had been structurally damaged during the 1964 9.2 Richter scale earthquake. A new primary care services facility was constructed across the street from the tertiary and specialty medical services part of ANMC.

**Formation of the Alaska Native Tribal Health Consortium**

In September 1997 Congress passed Section 325 of Public Law 105-83 Statute, which authorized the formation of a statewide tribal health consortium and defined Southcentral Foundation’s role as primary care agency of ANMC. The Anchorage Native Primary Care Center subsequently more than doubled in size within three years under Southcentral Foundation leadership. In December 1997, a new Alaska Native Tribal Health Consortium "ANTHC" was organized under IRS 501(c)(3) and a 15-member board was established.

From January to May 1998, the Consortium administrative structure developed through a Tribal Management grant. In February 1998, the first IHS contract proposal was submitted by ANTHC and a contract was formalized in June 1998. The contract limited the Alaska Area Office to retain selected programs and 20 employees.

In October 1998, ANTHC became the Title III Self Governance Compactor and co-signer of the Alaska Tribal Health Compact. As such, the Consortium assumed the functions, employees, and the approximate $40 million project funds for the Department of Environmental Health and Engineering, as well as other Alaska Area Office programs.

In October to December 1998, agreements were developed with tribes for sanitation facilities construction projects. In addition, negotiations began with Southcentral Foundation and IHS for management of the Alaska Native Medical Center. In November 1998, the ANTHC formally joined the Alaska Federal Health Care Partnership, which had significant impact on future telemedicine projects.

In December 1998, ANMC agreements were approved and Area and ANTHC personnel offices
processed 1200 employee agreements. ANTHC and Southcentral Foundation also established a Joint Operating Board for ANMC.

In January 1999, the ANTHC Board established four operating committees: Finance and Audit; Medical Services Networking; Health Facilities Advisory; and the Sanitation Facilities Advisory Committee.

In a culmination of years of planning and effort, in January 1999, ANMC management was transferred to ANTHC and Southcentral Foundation. By doing so, ANTHC became the largest Public Law 93-638 non-profit organization in the United States. Also in January 1999, the Alaska Federal Health Care Access Network telemed project was initiated by the Alaska Federal Health Care Partnership. In February 1999, ANTHC signed an agreement with the State of Alaska to assist with enrollment for Denali KidCare. This, and other agreements with other health-funding entities, began a series of processes, whereby ANTHC would not be solely dependent on federal funding alone.

In April 1999, ANTHC awarded its first $7 million in pass-through funds for Tribal health facilities improvement projects around Alaska. The Consortium organized a Division of Tribal Support Services to consolidate Area Office functions and services.

Also in April 1999, the ANTHC and Southcentral Foundation award $5.5 million in permanent Primary Care Awards to Tribes and regional health. In June through September 1999, the Consortium supported national efforts to reauthorize the Indian Health Care Improvement Act.

In June 1999, ANMC was designated as a Level II Trauma Center, the highest level of any health care facility in Alaska. In September 1999, the Consortium was approved for $8 million in FY1999 Contract Support Costs, which repaid up front tribal/regional start-up contributions and loans. Between 1999 and 2003 ANMC third-party revenues increased by 100% to $100 million.

**Strategic Planning**

In May 1999, the ANTHC Board outlined a one-year strategic plan for development and management of statewide health care delivery. In September 1999, ANTHC began a long-range master facility planning process for the Alaska Native Health campus. In spring of 2000, ANTHC outlined a 2000-2005 long-range strategic plan, and that summer, the ANTHC board of directors approved a new five-year plan.

In the summer of 2000 and fall of 2003, ANMC earned Joint Commission on the Accreditation of Hospitals Organization accreditation. In addition, ANTHC initiated internship and scholarship programs. In the winter of 2000, the ANTHC Board approved restructuring of company leadership with separate Chairman/President and Chief Executive Officer positions.

In the winter of 2001, Department of Environmental Health and Engineering was realigned along tribal regional corporation boundaries. This was followed by ANTHC working with ANHB on development of a statewide strategic health plan in the spring of 2001.

Also in the spring of 2001, renovations were begun at ANMC to keep up with its rapid growth since opening the new hospital in 1997, just four years prior. ANMC acquired and began implementation of a new patient information/billing system. Other developments included an agreement with Denali Commission to manage primary care facilities projects and ANTHC established a new entity, the Office of Alaska Native Health Research, under the Community Health Service.

In the summer of 2001, ANTHC purchased other property to further develop a campus concept at Tudor Centre. Development was also begun on Title V regulations.

In the fall of 2001, ANTHC was approved as one of eight Native American Research Centers for Health research grants. ANTHC entered into an agreement to lease new office space for Department of Environmental Health and Engineering. The ANTHC Board also approved a new Pediatric Intensive Care Unit, ANMC dining room improvements and submitted a proposal to change the indirect cost rate.

In the winter of 2001, the ANTHC Depart-
ments developed action plans. In the winter of 2002, the ANTHC Board reviewed/revised the 2005 Strategic Plan.

**Summary**

The Alaska Native health care system has come full circle. Over the last 10,000 -15,000 years the Alaska Native Health System developed from a traditional tribal based self-care system to a complex system that is interdependent on local, state, federal, and private insurance payers administered by Alaska Natives themselves. This system has risen to many challenges in the past and has made great strides through both ingenuity and necessity.

The Alaska Tribal Health System takes an intentional approach to planning. While the system may face an uncertain future, it is poised to continue it remarkable success. The regional health corporations are the backbone of the system and it is the regional health corporations that own the Alaska Tribal Health System. In addition, it is the Alaska Tribal Health System that is responsive to the needs and priorities of the regional health corporations and their Native constituents.

The spirit of the Alaska Native has inspired their health care providers at all levels to develop innovative "work arounds" to provide state of the art health care through regionalization and telemedicine. Despite the many challenges ahead, the Alaska Tribal Health System will continue to strive to increase the health of Alaska Native people to the highest status possible.

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**Abbreviations**

ANMC  Alaska Native Medical Center
AFHCAN  Alaska Federal Health Care Access Network
ANHB  Alaska Native Health Board
ANTHC  Alaska Native Tribal Health Consortium
IHS  Indian Health Service

**Appendices:**
Scope of Alaska Native Tribal Health Consortium

**Consortium staffing**
1650 full time equivalent staff*
1,275 at Alaska Native Medical Center
200 at Department of Environmental Health and Engineering
100 at Administration, Human Resources, Information Technology
75 at Community Health Services
* direct tribal hire, civil service, intergovernmental personnel agreement, and Commissioned Officers on Memorandum of Agreement

**Consortium financial Information**
Total revenues approximately $300M
45% IHS compact revenues
25% third party ANMC revenue
20% sanitation/health facility project funds
10% grants and contracts, and interest

**ANTHC expends**
$150M annually at ANMC
$95M annually for sanitation and health facility projects
$50M per year for Administration, Human Resources, Information Technology

**Table II: Alaska Tribal Health System Financing: Annual Estimates.**

|                      | Annual financing |
|----------------------|------------------|
| IHS operating        | $400M            |
| Medicaid/Medicare    | $150M+           |
| Third party insurance| $50M+            |
| State grants/other federal | $30M+        |
| Self-pay, access to care | $10M+        |
| Sanitation construction | $50M+       |
| Health facilities construction | varies       |
Consortium locations
Alaska Native Medical Center, 4315 Diplomacy Drive
Inuit Building, 4141 Ambassador, Administration, Tribal Support, Finance,
   Human Resources, Procurement
4201 Tudor Centre Drive, Community Health, AFHCAN, CDC Building: Community Health Services
3925 Tudor Centre Drive, Department of Environmental Health and Engineering
Old Seward Highway, Alaska Clinical Engineering Services
Department of Environmental Health and Engineering, Ship Creek yards
Dowling Road, Regional Supply Service Center
Bragaw Street, New Environmental Health offices
Village construction project sites throughout rural Alaska

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