ALASKA CHAP (Community Health Aide Practitioners)
Proposed Program Application for RURAL AFRICA

Whether in the global north or south, a common dynamic of "brain drain" by health workers from remote and rural communities to urban facilities is an issue which de-stabilizes rural health systems and contributes to lack of access for mothers and children to health services.

However, with major US resources under-girding both rural health worker trainings and telemedicine in remote Alaska, the Alaskan strategy has been to train and support community-based leaders who have at least an eighth grade education and who can provide "frontline" primary health care.

Alaska's Community Health Aide/Practitioner Program http://www.akchap.org/ is a primary health care model, in partnership with the University of Alaska Fairbanks, with a forty year history. Central elements of this program can be assessed and designed to meet needs in Africa. Supportive telemedicine, with leadership at University of Alaska Anchorage, has continued to improve infrastructure which supports remote diagnostics, referral logistics, bridging remote clinics, mobile units and district hospitals with resources hundreds of miles away.

Now MAMASnet proposes partnership with University of Alaska Fairbanks and the Alaska CHAP program, to assess needs and adaptation of CHAP for rural Sierra Leone.

I. The Alaska Model: Historical Context

The Community Health Aide/Practitioner (CHA/CHP) concept began in the 1950's in response to a number of health concerns including the tuberculosis epidemic, high infant mortality and maternal morbidity, and the high rate of injuries in rural Alaska. Medical staff at regional centers and community volunteers both realized the benefits of providing direct services at the village level, to meet the health needs of the remote Alaskan population. A natural progression of training and supervision developed and the Community Health Aide Program evolved. With U.S. congressional funding in 1968, CHAs were paid a salary and formal training programs were established. It has proven to be a cost effective, efficient and essential component in improving the health of the Alaska Native people by decreasing morbidity and mortality.

Alaska has a total landmass of 586,585 square miles and constitutes one-fifth of the area of the United States (see Figure 1). Within this vast area, approximately 50,000 Alaska Natives live in over 180 villages located as far as 1300 miles from the nearest regional center. Ninety percent of the villages in rural Alaska are isolated from each other, separated by tremendous distances, vast mountain ranges, stretches of tundra, glaciers, and impassable river systems. Most of the communities are not connected to a road system. Air transportation is the primary means of travel on a statewide basis. Provision of goods, services and delivery of health care to these remote sites is always a challenge.

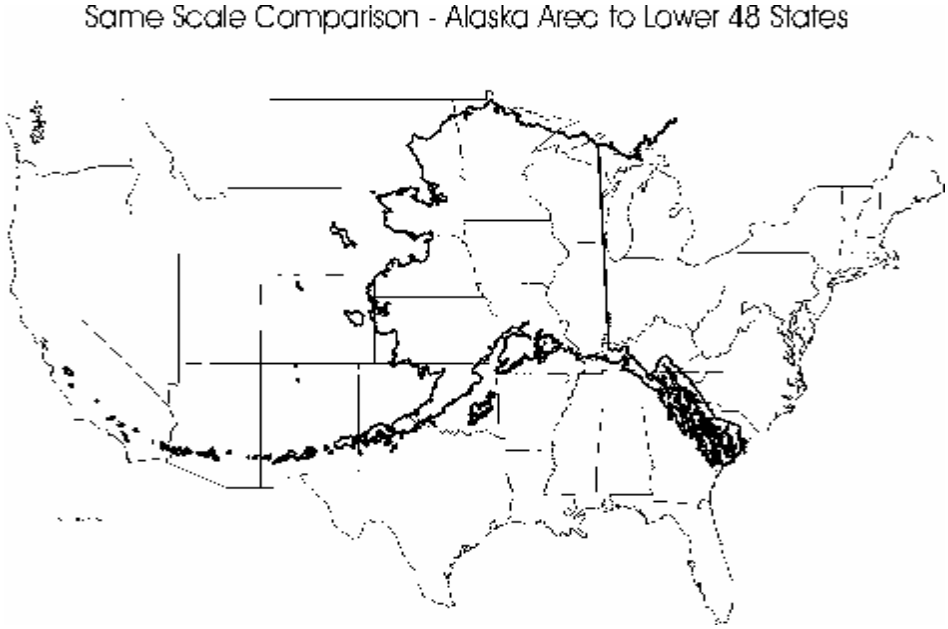

Figure 1

The CHAs/CHPs maintain village clinics while providing acute care walk-in evaluation and treatment for common medical problems; emergency care; preventive care (prenatal, well child monitoring and immunization, and health surveillance); and, chronic disease monitoring, evaluation and referral. Their clinical practice is guided by the *Alaska Community Health Aide/Practitioner Manual* (CHAM), 2006 edition; written at a 6th - 8th grade reading level. It is made up of four integrated and cross-referenced books which provide consistent treatment guidelines and Medical Standing Orders for the CHAs/CHPs. The four volumes of the CHAM are:

1. Emergency Field Handbook
2. Patient Care Visit
3. Medicine Handbook
4. Reference and Procedure

All four volumes are on a CD-ROM. The CHAM Patient Care Visit book is indexed by medical symptoms and provides the CHA/CHP with a "how to" guide to collect a problem specific patient history, perform the appropriate physical exam and lab tests, formulate an assessment, and develop a treatment plan. This is then confirmed by telephone/fax/telemedicine computer with a physician (or the CHP can treat with a medical standing order depending on level of training). [Until the early 1980's all communication was done by radio.]

There is an established referral relationship which includes midlevel providers, physicians, tribally managed regional hospitals, and the Alaska Native Medical Center, a tertiary care facility in Anchorage. In addition, a variety of health care professionals make visits to the villages to see patients in collaboration with the CHAs/CHPs.

Disease patterns and CHA/CHP duties have changed over the last fifty years. When the program began, infectious diseases were the major emphasis with tuberculosis and meningitis causing great morbidity and mortality in the villages. Since then, infectious diseases are not as prominent but lifestyle diseases have become a dominant concern. Diabetes, heart disease and cancer were nearly unknown in the population during the 1950's but are common today. Cancer is now the leading cause of death in Alaska Natives, behavioral health diagnoses are common and AIDS is also a concern.

II. The Alaska Model: Current Program

The Community Health Aide/Practitioner Program today is run by the Alaska Native Tribal Health care system (26 independent health organizations). Regional native health organizations hire CHAs from candidates selected by the communities in which they live and will serve. There are approximately 500 CHAs/CHPs working in 180 village clinics providing 300,000 patient encounters per year. In addition to staffing and managing their individual clinics during regular office hours 5 days a week, CHAs/CHPs respond to medical emergencies 24 hours a day. Although formal training occurs as soon as possible, they start working in the clinic as soon as they are hired, learning the CHA/CHP role and providing patient care as they progress through training and required field work. Unlike other primary health care providers, CHAs carry the full responsibility for their position prior to completion of their education.

CHAP has expanded its curriculum and training over the last thirty-nine years in partnership with the University of Alaska Fairbanks (UAF) which offers a Certificate and Associate of Applied Science Degree in Community Health for the Community Health Practitioners.

Supervision is an essential component of this program. Field Supervisors, employed by the tribal organizations, help assure the quality of health care provided at the village level, monitor the CHAs/CHPs overall job performance, and support and guide the worker. The supervisors ensure that the policies of the organization are implemented for these village based employees. Supervisors provide oversight via field visits to village clinics and through daily to weekly telephone communications with the CHAs/CHPs. They support, teach and give guidance to CHAs/CHPs, assist with problem resolution, provide moral support, and serve as a liaison between the medical system and the CHAs/CHPs, and the CHAs/CHPs and the village. The Supervisors work very closely with the local governing body in each village to ensure that CHAs/CHPs receive necessary community support.

III. The Opportunity: An International Model

MAMAS International proposes to adapt CHAP as a key component for prototype rural health infrastructure for maternal-newborn primary and emergency care in Africa. Programs will directly address existing research on both clinical and contributing causes of maternal-neonatal mortality as identified by the United Nations World Health Organization, and supporting components of rural health service delivery which accelerate targets for reduction of maternal-neonatal mortality as outlined in the United Nations Millennium Development Goals for 2015.

The Project will demonstrate in target districts a technology and programmatic system which accelerates baseline assessment, cooperation between Alaskan and African stakeholders for maternal-newborn health. The sequence of steps will include CHAP representation in anticipated 8/07 design mission to Sierra Leone, with multi-stakeholder analysis of current systems, and preliminary planning for convergence of Alaskan and African systems as identified by stakeholders, with exchanges and eventual trainings of new cadres of individuals in Africa at local levels.

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