

Yukon Kuskokwim Health Corporation

- Native owned and operated health care system in 'Bush Alaska'
- Regional center is based in Bethel—400 air miles west of Anchorage, near the Bering Sea
- Provides cradle to grave care for 27,000 Yup'ik Eskimo and Athabascan patients



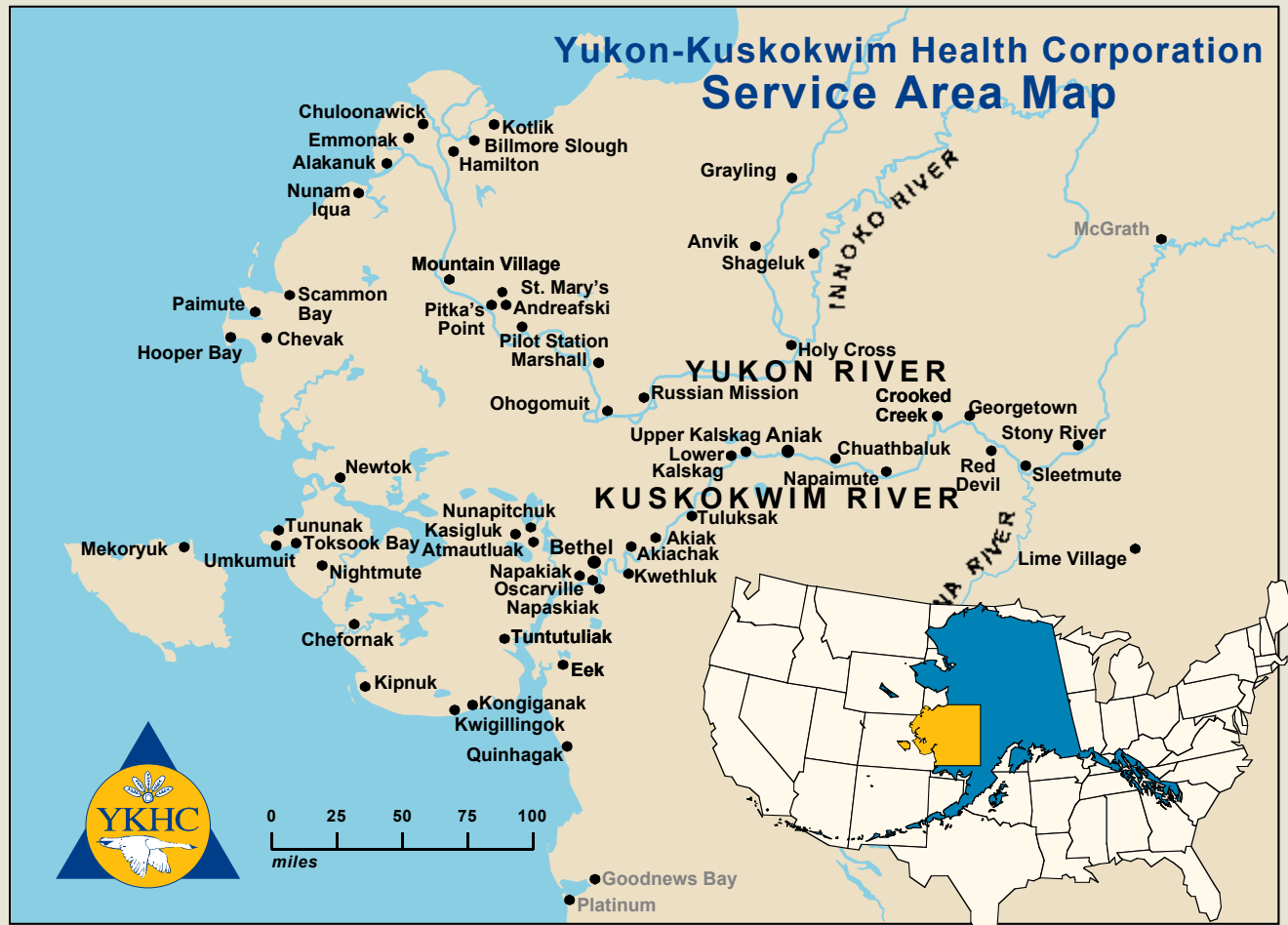
*No roads lead in or out—
The ultimate managed care system.*

Yukon Kuskokwim Health Corporation

- Medical staff of over 70 physicians, midlevels, dentists, pharmacists and optometrists
- More than 100 visiting specialists and recurrent locums
- Our patients live in 50 villages spread out in a region the size of Oregon or Washington state
- Practicing 3rd world medicine in the US with good medical infrastructure/support ...



Yukon Kuskokwim Delta Region

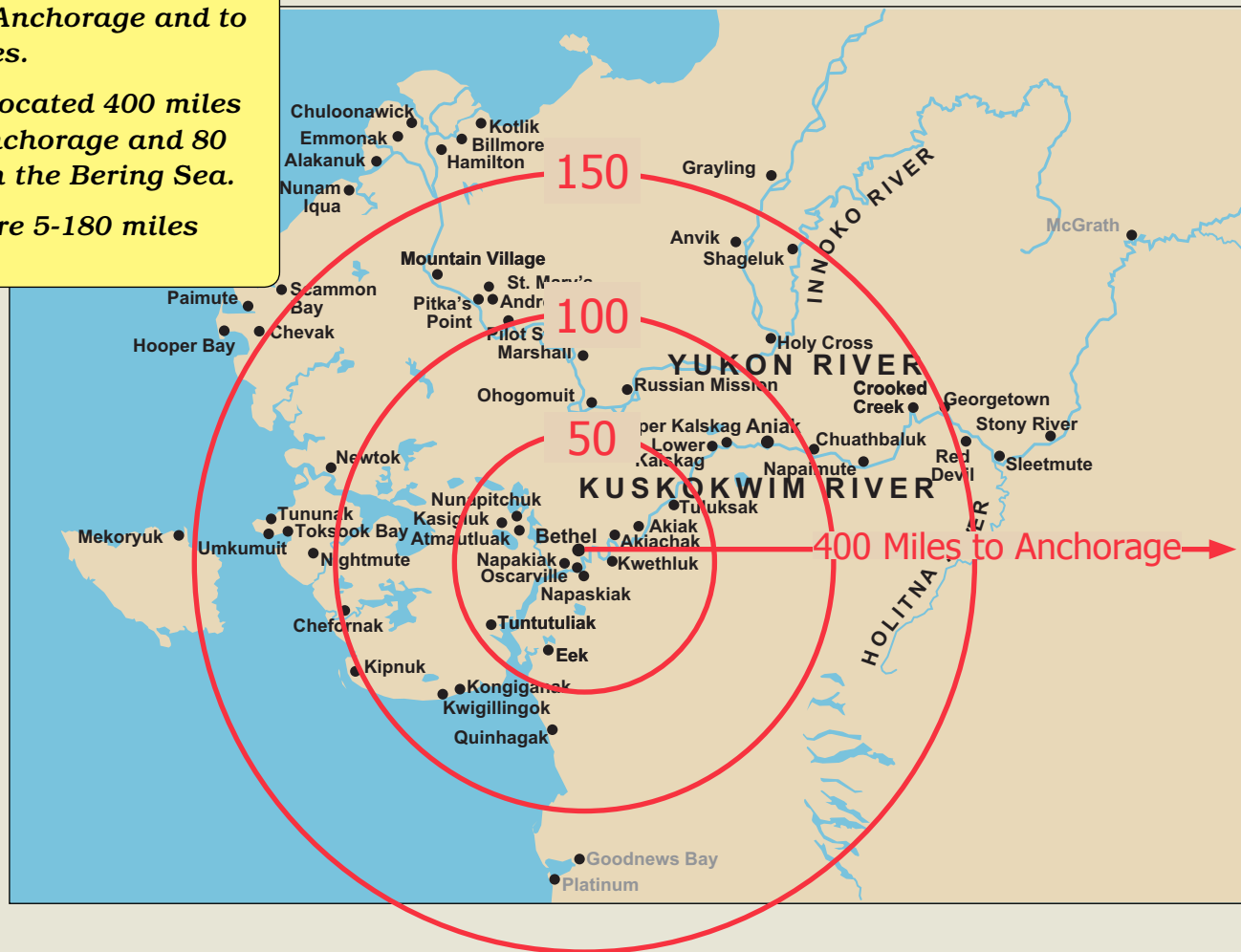


Yukon Kuskokwim Delta Region

This picture gives you an idea of distances from Bethel to Anchorage and to the villages.

Bethel is located 400 miles west of Anchorage and 80 miles from the Bering Sea.

Villages are 5-180 miles away.



Yukon Kuskokwim Delta Region



- Approximately 27,000 Population
- Mostly Yupik, some Athabascan
- 50% of the population is under 18
- Yupik is still the primary language spoken by young children and elders
- Poorest region in Alaska and lowest per capita income in the US
- Traditional subsistence lifestyle

Summer Subsistence



Drift netting for salmon in the summer is a main subsistence activity.

The fish is brined and dried and stored for eating throughout the year.



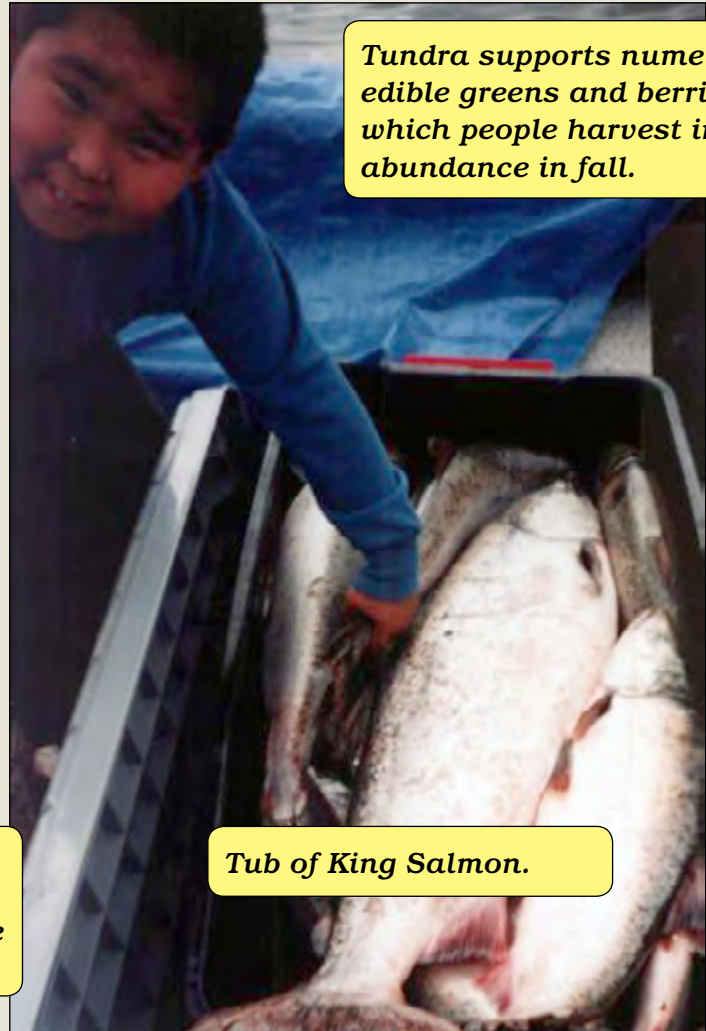
Drift netting for salmon is a major summer subsistence activity

Summer Subsistence

King Salmon drying at fish camp.



Tundra supports numerous edible greens and berries which people harvest in abundance in fall.



Tub of King Salmon.



Berries used predominantly in akutaq "eskimo ice cream."

Fall and Winter Subsistence



Hunting for Caribou and Moose

Winter Subsistence



This is a picture of Ida, one of our recruiters, ice fishing for white fish in a nearby village.

You can see the hole in the ice and her pole and line.

Ice Fishing

Traditional Crafts



This region has maintained a strong cultural identity and kept alive many of its native traditions.



Exquisite basket and skin sewing

Transportation



River



View from a bush plane



*View from a truck
on the 'ice road.'*

- Bethel is a "Bush" town—no roads in or out.
- Jets to Anchorage multiple times per day.
- Travel to villages is by scheduled mail and chartered planes, boat, hovercraft, medevacs, and snow machine.

Transportation



Cars also drive on some parts of the river and the ice road is plowed and maintained by the state.



- The river is the primary means of transportation in the summer, and becomes a 150-mile ice 'highway' in the winter.

Transportation



Note the sled attached to the snow machine.

Imagine trying to transport a 500 pound isolette from the plane to a village clinic and back and keep it warm in minus 20 degree temps.

I have carried a baby back to the plane under my parka, while bagging.

Medevac from Village to Bethel

A Typical Village



- 50–1,250 population, mostly Native
- Post Office
- General Store
- Village Clinic
- Laundry Facility
- Steam
- School(s)

A Typical Village

- Houses are built off the ground to avoid melting the permafrost
- Multiple extended family members live in each house
- Some homes have running water and sewer
- Many homes still use honey buckets & collect snow/rainwater



A Typical Village



Boardwalks for pedestrians, bikes and four wheelers

A Typical Village



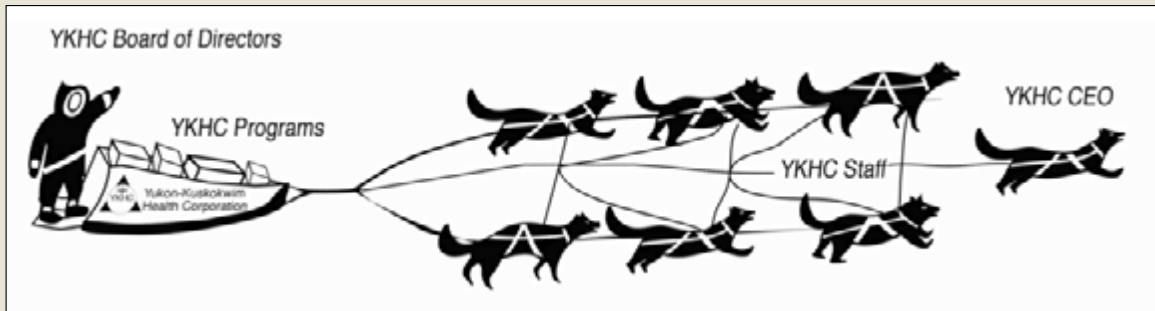
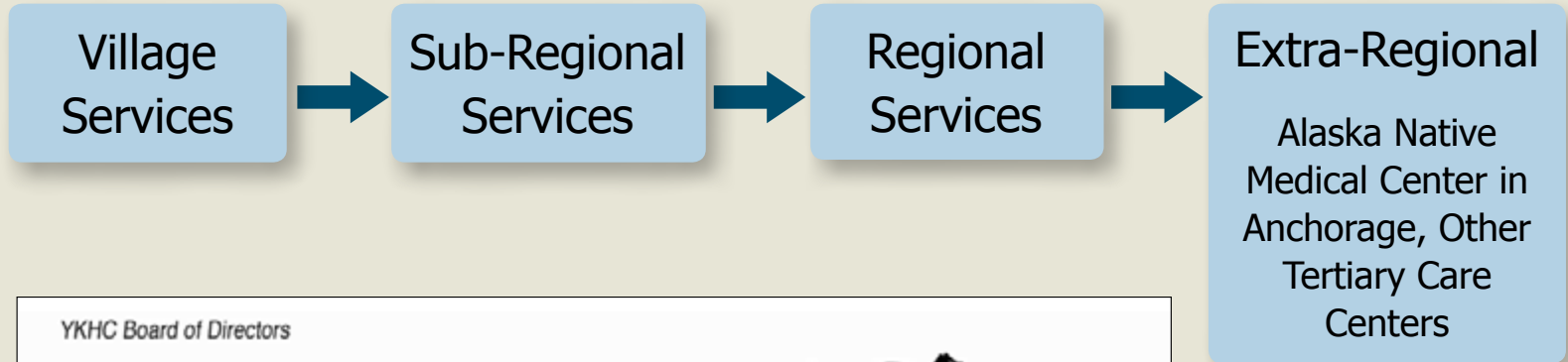
Couple walking on the boardwalk with baby, toddler and cell phone

Bethel

- Commercial and medical hub of the region
- Largest 'village' in the Delta
- Approximately 6,000 residents
- 50 percent non-Native
- Two large general stores
- Many restaurants, churches, businesses
- Four schools
- One two lane highway runs through town
- 10 miles of paved road



YKHC Four-Tiered System of Health Care



YKHC provides medical services through a 4-tiered system of care that starts in the villages.

The bulk of all the care provided to our patients occurs in village clinics.

Subregional clinics (SRCs) provide a higher level of care for their surrounding villages.

Services based in Bethel provide an even higher level of care for villages and SRCs.

Lastly, the Alaska Native Medical Center in Anchorage provides tertiary care and extra regional support.

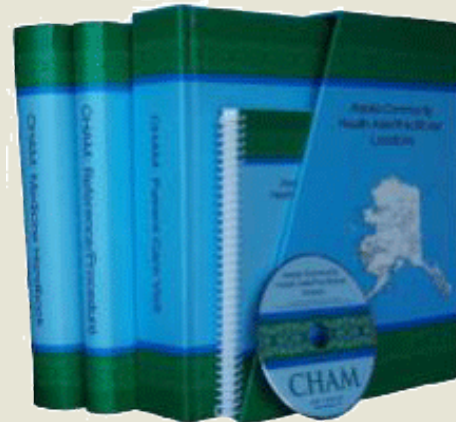
Village Based Care



Nightmute Clinic

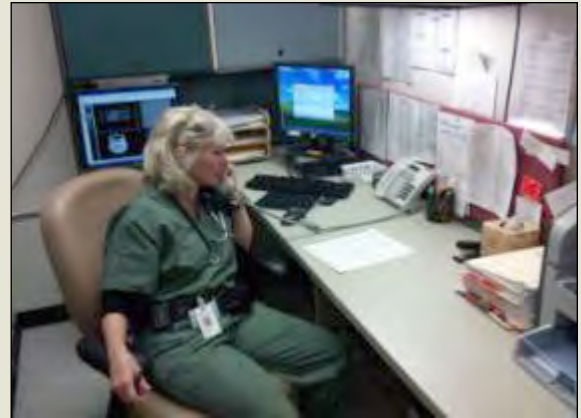
Village Based Care

- Village based care in 44 clinics
- Medical care provided by health aides--a delivery system that is unique to Alaska
- **Health Aides-local residents with at least high school education**
- Four levels of advancing training and certification with associated standing orders
- Use comprehensive, protocol-based manual



Village Based Care

- Supervised by physicians and midlevels—consult on all patients outside their scope of practice.
- Communicate with providers in Bethel via detailed EMR encounter forms, telephone and telemedicine (RMT)



In the background of the picture you can see the digital teleradiography unit that we use to view and discuss Xrays with our teleradiologist consultants.

To the right is the computer used to view our telemed pictures sent from the villages and to specialists for consults.

Typically pediatrics responds to 15–25 cases a day from the villages about chronic peds kids that require close pediatric supervision and care. Family Medicine gets more than 200 per day.

When a case comes in, it is reviewed. We pull up the computerized record, check out the patient's problem list, upcoming appointments, care plans etc. and then proceed to treat or watch a patient in the village, send the patient in or medevac the patient depending on how sick they are.

Village Based Care



- CHAs provide primary care, disease prevention and health promotion activities as well as acute and emergency care.
- 200 Health Aides respond to 150,000 patient visits a year.



Village Based Care

- 2-5 Health Aides per clinic
- On-call 24/7
- CHA's know or are related to most of their patients



Village Based Care

- Rapid Strep Screens
- Urine Dipsticks
- Glucose and Hemoglobin Measurements
- Telemedicine Carts
 - Camera
 - Digital Otoscope
 - EKG
 - Live Video Stream



Telemedicine carts allow Health Aides to send pictures of rashes and ears, EKGs and live video streams that help us assess the patient with the Health Aides.

Village Based Care

- Some Health Aides are trained and competent to start IVs and give fluids.
- Limited oral, IM, nebulized and topical medications (no IV medications)
- O₂



Note the old green O₂ tank covered by a towel in an exam room

Village Based Care



CHAs are the 'Eyes and Ears' of our remote medical system.

We rely heavily on our health aides' documentation and physical exam skills.

Subregional Clinic Based Care

Five Subregional Clinics

- Aniak
- Emmonak
- St. Mary's
- Hooper Bay
- Toksook



Next up in our four tiered system, we have five sub-regional centers scattered throughout the region.

Subregional Clinic Based Care



Five Subregional Clinics and the surrounding villages they support

Subregional Clinic Based Care

- Mid Level Practitioners
(when available)
- Community Health Aides
- Expanded formulary
- Urgent Care Room
- Limited lab testing
- X-rays
- Dental Work Station



Regional Based Care

Yukon-Kuskokwim Delta Regional Hospital



- 3 Family Medicine/Pediatric Clinics
- Pharmacy
- Specialty Clinics
- Physical Therapy
- Optometry
- Dental
- Nutrition/WIC/Dietary/Audiology
- Adult Alcohol Detox/
- Pediatric Inhalant Center
- X-Ray/CT/US/Lab
- OR/Anesthesia
- 40 Bed Peds/Adult Inpatient/OB Unit
- Respiratory Therapy
- Behavioral Health
- Teleradiology
- Level IV ER
- Medevacs

Regional Based Care

Yukon-Kuskokwim Delta Regional Hospital

- YKHC in Bethel is the largest of 10 regional centers in Alaska.
- YKHC has the highest acuity patients and is responsible for more than a third of all referrals to Anchorage tertiary care centers.
- The Yukon-Kuskokwim Delta Regional Hospital is a 40 bed facility with 4,000–5,000 admissions per year and more than 400 deliveries a year.
- OR is for emergency C-sections, ectopics, appys that we cannot get to Anchorage in time as well as elective tubal ligations and D&Cs.
- Anesthesia/RT/BH/Teleradiolists are available 24/7.
- Level IV ER has more than 20,000 encounters per year with more than 600 medevacs from the village to Bethel and 300 medevacs from Bethel to Anchorage—which gives you an idea of the intensity of the ER activity.
- Other hospital-based services include three Family Medicine/peds/Women's Health clinics, specialty clinics, Audiology and Physical Therapy, which account for 40,000 encounters per year.



What We Don't Have



- Specialists
- Intensive Care Units
- Specialty Diagnostic and Treatment Modalities

What We Do Have

- Great patient population
- Fascinating clinical challenges
- Strong clinical staff
- Resources needed to provide 90 percent of the care needed in the region
- Great specialty support
- Common mission of “Working Together To Achieve Excellent Health.”

