Copper River Regional Health Facility Plan

Final Report

December 16th, 2005

Prepared by nbbj

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Purpose

NBBJ was contracted by the Alaska Native Tribal Health Consortium (ANTHC) and the Denali Commission in the summer of 2005 to conduct an assessment of the regional health needs of the Copper River Basin. The purpose of the study was to identify service gaps that will help in the prioritization of facility improvements for healthcare within this region. The end product has been to develop architectural space programs for primary care, elder care, dental care and behavioral health care services for the various providers that serve the 3,200 people that live in this region. This report will act as a map for healthcare facility improvement needs over the next few years.

NBBJ was tasked with developing the following as part of this work effort:

1. A description of the existing service delivery model including:
    a. staffing
    b. services
    c. facilities

2. Identification of gaps in services
3. Identification of proposed, sustainable, expanded services while minimizing duplication of services
4. Translation of proposed services into facility needs
5. Development of regional health strategy that includes prioritizing health facility development based upon a consensus on improvements to the health service delivery systems in place within the region

Process

The following outlines the approach and process undertaken by NBBJ to develop a regional facility health plan:

- A review of the May 2004 Needs Assessment; which was a preamble to this work effort
- An assessment of surveys completed by providers within this region
- Provider interviews and site visits to assess the current conditions and fully understand the health care delivery system in the region
    - Additional planning documents provided by stakeholders were used to supplement existing documentation.
- A regional planning meeting facilitating group discussions about health care service and facility gaps in the region
- Analysis of the demographics of the region to aid in planning for future populations
- Analysis of service and facility gaps as they relate to:
    - Primary care
    - Elder care
    - Dental care
    - Behavioral health delivery in the region
- Meetings with the Denali Commission to reconcile space needs and funding requirements for health care facilities
- Development of an architectural space program and prioritization for health care facilities improvement within the region

Healthcare Service Delivery

The Copper River Region is located about 180 miles North-East of Anchorage. The residents live mainly in villages ranging in size from 80-500 people scattered throughout a geographic area about the size of the state of Ohio. The regions population totals some 3,200 people and is not expected to appreciably change in numbers over the next 10 years. However, shifts in population age groups will occur that will have an impact on the health care needs of the Region. Specifically, it is estimated that the population group of people 65 and over will grow by 180%. In trying to close the gaps that exist within the healthcare system, it will be important to focus on this segment of the population.

Providers of Health Care in the Copper River Region

Currently, there are four main providers of health care in the region providing varying levels of care to the residents of the Copper River area.

- Chitina Tribal and Community Health Center (Chitina)

- Copper River Native Association (CRNA)
  - Kluti-Kaah Village Clinic
  - Cantwell Village Clinic
  - Tazlina Village Clinic
  - Gulkana Village Clinic
  - Wrangell Mountain Dental Clinic

- Cross Road Medical Center (CRMC)

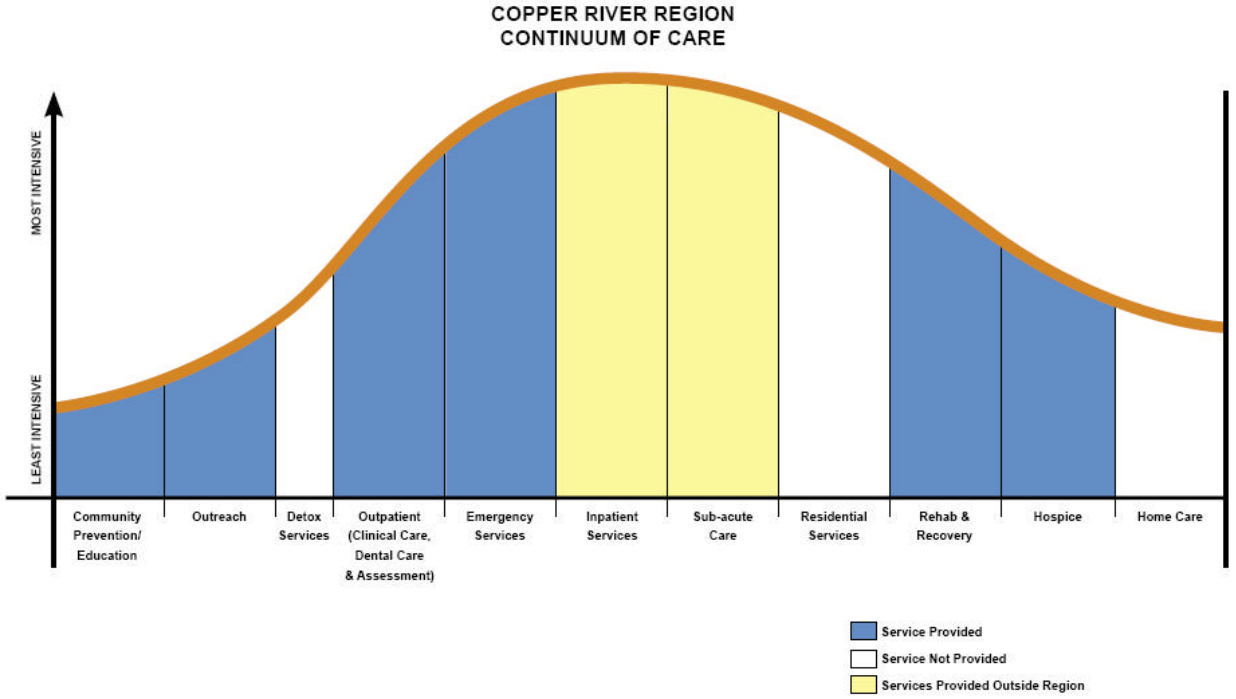
- Mount Sanford Tribal Consortium (MSTC)
  - Chistochina Clinic
  - Mentasta Lake Clinic

The 2 regional clinics, Cross Road Medical Center and Copper River Native Association, are located centrally in the region and provide higher level services with more staffing capacity than the 7 Village and Tribal clinics that support the smaller communities in the region. CRMC is the regional primary care facility with 1 staff physician and 14 RNs on call 24 hrs a day, while CRNA is the regional provider for behavioral health services and has 11 medical professionals supporting its clinical services.

In addition, CRNA also provides staffing for 4 village clinics that serve the region. Kluti-Kaah, Cantwell, Gulkana and Tazlina have one Community Health Aide (CHA) each that work out of a clinic located in their villages. The convenience of the clinics and the ability of the CHAs to relate to the patients, provide very high usage rates for these village clinics. Two other organizations MSTC and Chitina Native Tribal Organization, provide clinics to the residents of their respective communities. MSTC currently runs clinics in Mentasta Lake and Chistochina. These clinics operate out of office spaces meant for the tribal organization, creating a need for their own clinical space. Chitina has recently moved into a 2,000 sf facility and has a mid-level medical professional on staff.

Service Provision

During NBBJ's visit to the Copper River Region, interviews with health care providers and tours of their facilities provided an understanding of the service delivery system as well as the facility gaps that exist. The following graphic depicts the continuum of care for the Copper River Region. The vertical axis conceptually displays the level of intensity for the services shown. For example, inpatient services are the most intensive, requiring the most intensive staffing and the most highly regulated facilities. The horizontal axis shows the progression of services as one moves through the health care system. Some services are appropriately provided outside the region, while others are absent but should be provided in the region. Of the services present in the region, some levels of service may be appropriate and some may be lacking.



Within the continuum of care for the region, there are gaps in some services which are currently not provided as indicated by the preceding graph. Currently, residents of the region travel to Anchorage or other out-of-region areas for in-patient care. The population density to support a hospital is not present in the Copper River region, so leaving the region for inpatient care makes sense. The focus is turned to the other services that are absent in the region: detox, residential services and home care services. This is important to note because the absence of residential and home services that cater to elders directly impacts a growing elderly segment of the population. Also, substance abuse and Fetal Alcohol Syndrome persist as huge problems facing rural Alaskans. Currently, there are no service provisions for detox in the region.

Within the services currently provided, denoted by the blue shaded portions of the graph, deficiencies also exist. In general, service delivery is compromised in the region because many of the existing health care facilities are not adequate to meet the needs of their users and do not function optimally for healthcare service delivery. The providers in the region have different issues related to their respective facilities ranging from space shortages and poor functional layout to structural damage or obsolete temporary facilities that have outgrown their useful lives. Whatever the case, many facilities that provide healthcare to the residents of the Copper River Region are in dire need of improvements or replacement.

Access to care may also compromise service delivery. Access issues may be due to the difficulties in getting to a care provider due to road conditions, vast geographic distances or lack of transportation (especially in getting to services in Anchorage). Access may also be affected by lack of provider resources. Access issues contribute to lower than expected utilization rates. When the local providers are benchmarked against a regional equivalent for healthcare delivery, they come up short in terms of usage rates. For example, the average number of clinic visits per person recorded by Southcentral Foundation's primary care practice is 3.7. In comparison, CRMC has an average rate of about 2.41. Applying the 3.7 usage rate to the regions population shows a gap in service in the region of about 2,300 visits.

Also, dental care is not adequately provided in the region. Currently, there is one dentist serving the whole region. IHS guidelines shows that a population of 3,200 can support 3 dentists. Dental records also indicate about 2,000 annual patients using the dental services, which leaves about 1,200 residents of the Copper River Region who are not seeing a dentist on a regular annual basis. Interviews with the dentist and residents of the area also showed a long wait time for appointments, making access difficult.

In addition, severe gaps exist in the delivery of elder care services. There are currently about 7 people from the region in skilled nursing and extended care facilities outside of the Copper River area. With the estimated growth in population, the need will likely increase to about 13 beds by the year 2015. This is further validated by using at-risk calculations for nursing home use provided by the National Center for Health Statistics. The calculations show that about 10 beds are needed today given the population make up of the region.

Residential services such as assisted living facilities that allow elders to live in their own home or apartment in a supported environment are also lacking in the region. As the population ages, this need will increase. Some home care services, like visiting nurse programs, are provided but many services are lacking. Surveys sent out to the residents of the region indicated that there is a demand and stated need for assisting elders with activities of daily living.

Other residential care needs were also noted. Interviews with the healthcare providers indicated that they have a challenge with recruiting and retaining medical staff in the region due to the lack of housing. In fact, three of the providers surveyed had lost personnel recently due to lack of housing. One healthcare staff stated that he was commuting for over 90 miles each way to get to work because there was no housing available in the area.

Access to behavioral health care is also a challenge for Alaskans state-wide as well as within this region. Facilities used to deliver outpatient behavioral health care are obsolete. Although it was agreed that in-patient care was best suited for outside the region in Anchorage, providers expressed a desire to have observation beds for detox and mental health patients in the Region. Talks have been initiated between CRMC and CRNA to see if this would be possible to provide.

Finally, the lack of domestic violence and sexual assault services in the region needs to be addressed. While these services are not health care per se, individuals involved often require health care and/or behavioral health services. Facilities and services that cater to victims were seen as a huge gap that needed to be filled within the Copper River Region.

Facility Recommendations

The following facility recommendations culminates NBBJ's work effort and provides a summary of the facility improvements needed in the region to allow for the provision of adequate healthcare services.

Programs & Services

1. Wellness & Education

- Wellness and Educational Program should be a focus for all clinics
  - Provide spaces and programs to support this
  - Active participation within the schools in the area is key
- Define the primary role of village clinics as preventive care clinics

2. Detox

- Include in wellness and education programs
- Continue discussion for providing detox observation beds in region (CRMC & CRNA)

3. Outpatient Primary Care

- Facility upgrades are needed to allow the clinics to function better
- Provision of an additional village clinic at Gakona would provide better convenience and alleviate pressure on the staff at other village clinics

4. Dental Care

- Addition of one Full-Time, and one Part-Time dentist appear needed to meet the demand for dental care in the region
- Develop school programs that teach the importance of prevention and give fluoride treatment to children

5. Emergency Medical Services (EMS)

- Further assess need for at least one more station North of Glennallen

6. In-patient/Sub-acute Care

- Service not appropriate for Region

7. Residential Services

a. Elder Care
- Assess feasibility for an extended care facility (nursing home) in the region to respond to demands for this population group, ~10 beds needed
- Provide more outreach services for elders in their homes

b. Staff Housing
- More housing needed throughout region to support clinics

8. Rehab & recovery
- Current use at Chiropractic Clinic appear adequate for level of care provided
- Further need for a certified physical therapist/chiropractor in region

9. Hospice
- Program provided by CRMC

10. Home Care & Support
- Communities should plan out-reach services to elders

Space Summary

Regional Clinics

1. CRNA – Provide new facility. Health Care needs estimated at 15,000 sf, as part of larger multi-use facility

2. Cross Road – Renovation and replacement of basement function. Addition of space estimated at 10,000 sf

Village Clinics

1. Gakona – Provide space for clinic. Space will be part of multi-purpose facility. Estimated space is 2,000 sf

2. MSTC- Provide clinics at Chistochina and Mentasta Lake. Both fit within Denali Commission recommended space for clinics. Estimated space is 1,500 sf for Chistochina, 2,000 sf for Mentasta Lake

3. Chitina – More space to be considered with additional service needs

Additional Services Needed in Region

1. Detox and Mental Health Observation Beds
   - Investigate partnership between CRNA and CRMC
   - Possible use of observation beds at CRMC for detox and mental health patients that need it

2. Domestic Violence and Sexual Assault Safe House
   - High incidence in area
   - Need a safe space centrally located and accessible to state troopers
   - Medical expertise also needed to treat victim

Outcomes and Next Steps

- This study determined that the current service providers have complementary roles and their roles within the healthcare system are clearly understood.

- This regional healthcare strategy was unanimously approved at the December 9, 2005 meeting by 20 stakeholders and representatives from all the healthcare providers in the region.

- The Regional Economic Development Council agreed to act as the umbrella organization so all entities can work together in advancing the healthcare strategy. John Downs is the contact person.

- The individual providers need to adhere to the Denali Commission process for applying for facility funding. Additional information sources and contacts are provided on the Denali Commission web site.

Meeting Attendees: Copper River Regional Health Facility Plan Group Meetings

Place: BLM field office, Glennallen
Date: Thursday, September 29 from 10 am – 2 pm

Name	Organization
1. Gilbert Gutierrez	CRNA
2. Scott P. Monroe	MSTC
3. Tessa Rinner	Denail Commission
4. Mae Marshall	CRNA
5. Robert Marshall	CRNA
6. Carolyn Gove	Denali Commission TASC
7. Rose Jerue	CRNA
8. Veronica Nichols	CRNA
9. Tammany Straughn	CRNA
10. Eleanor Dementi	CRNA
11. Pauly Jerue	Kluti-Kaah
12. Charlene Nollner	Gakona
13. Albert Craig	CRNA Kluti-Kaah
14. Doug Vokko	CRMC
15. Michelle Bayless	Gakona/Chitina
16. Teri Nuher	CRBRHA
17. Noel Rea	SOA/Denali Commission
18. Jerry VanBenCoten	Chitina
19. Agnes Denny	MSTC
20. Karen Eskilida	Chitina
21. Terrie Martin	NBBJ
22. Nnenna Emenyonu	NBBJ
23. Paul Morrison	ANTHC-DEHE

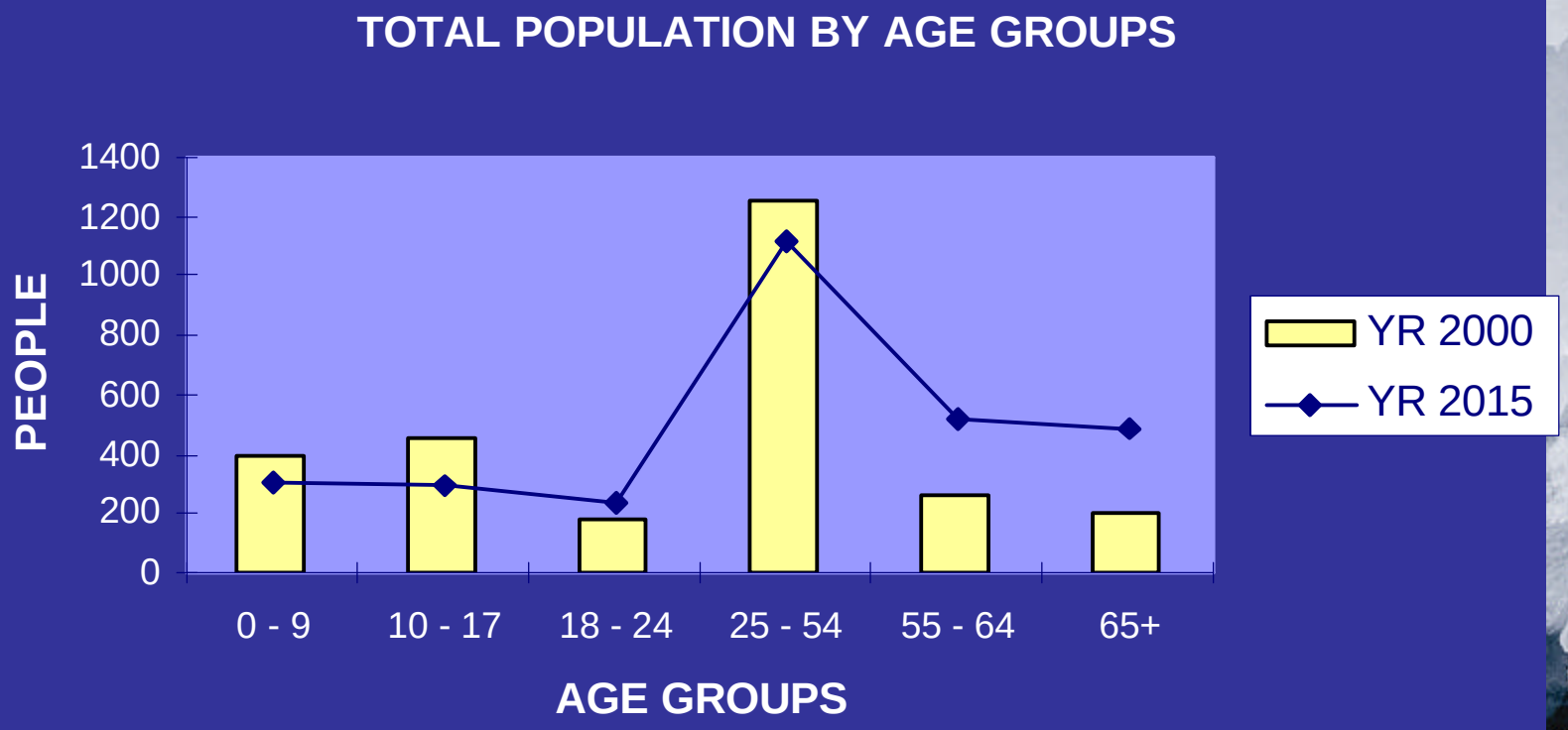
Place: Kluti-Kaah Hall in Copper Center
Date: Friday, December 9 from 10 am – 2 pm

Name	Organization
1. LaMonica Claw	Gulkana Village
2. Anna Young	Gulkana Village
3. Viann Nation	CRNA
4. Brenda Tyone	CRNA
5. David Abbott	CRMC
6. Bill Leino	CRMC
7. Doug Vokko	CRMC
8. George Drinkwater	MSTC
9. Ramona A. Justin	MSTC
10. Michelle Bayless	Gakona Village/Chitina Village
11. Charlene Nollner	Gakona Village
12. Virginia Gene	CRNA/Gakona Village
13. Christopher Gene	CRNA/Gakona Village
14. Susan Voghn	Kluti-Kaah/CRNA
15. Lorraine Jackson	CRNA/Gulkana Council
16. Robert Marshall	CRNA
17. Mae Marshall	CRNA
18. Gilbert Gutierrez	CRNA
19. Hannah Hawkins	Denali Commission
20. Garolyn Gove	Denali Commission TASC
21. Tessa Rinner	Denali Commission
22. Albert Craig Jr.	Kluti-Kaah
23. Allen Bollinger	ANTHC-DEHE
24. Terrie Martin	NBBJ
25. Nnenna Emenyonu	NBBJ
26. Rose Jerue	CRNA

SERVICE & FACILITY GAPS

Residential Services

Elder Care



SERVICE & FACILITY GAPS

Residential Services (Nursing Home)

Elder Care

- At risk calculations for nursing home usage provided by National Center for Health Statistics
- Shows a need for about 10 nursing bed units with the current population of the region

Age	Total	At Risk of Nursing Home Use[61]	Total Demand
55-64	294	0.001	0.294
65-74	178	0.011	1.958
75-84	75	0.046	3.45
85+	24	0.192	4.608
	571		10.31

SERVICE & FACILITY GAPS

Residential Services (Nursing Home)

Elder Care

- Bed demand calculated by number of Copper River residents currently in Nursing home units outside of the Region multiplied by population projections

Current Population 65+ *277*
2015 Population 65+ *500*
Rate increase *181%*

Facility Type	Current Utilization	Projected Need
Providence Valdez, Extended Care Center	1	2
Mary Conrad Center, Anchorage	2	4
Providence Extended Care Center, Anchorage	4	7
TOTAL	7	13

Total demand yr 2015

SERVICE & FACILITY GAPS

Residential Services: **Staff Housing**

- Clinics have challenges with recruiting and retention
- High turn-over of Physicians and RNs at Cross Road
- MSTC Behavioral Health Aide commuting 80+ miles
- Dental Hygienist commuting over 1.5 hrs per day
- Chitina, MSTC have staffing shortages (administrative support)
- All clinics have stated a desire for more housing to accommodate their staff

SERVICE & FACILITY GAPS

Rehab & Recovery

- Some out-patient physical therapy services provided by Glennallen Chiropractic
- Strong support for chiropractic care in region
- Average of 3,600 visits annually
- No transitional or in-patient services provided in Region

SERVICE & FACILITY GAPS

Hospice

- Hospice program provided by CRMC for the region
- Program implemented 2 years ago

SERVICE & FACILITY GAPS

Home Care

- Survey results asked regional elders if they needed or received assistance with basic tasks (CRHNA 2004)

Need for Assistance with Activities of Daily Living

Task	Difficulty	Get Help	Difference
Doing heavy housework	8.8%	10.0%	*
Doing light housework	4.7%	3.5%	1.2%
Chopping wood	7.1%	7.1%	0%
Remembering things	9.4%	.6%	8.8%
Taking medication	4.7%	4.7%	0%
Hauling water	6.5%	7.1%	*
Preparing meals	4.7%	2.9%	1.8%
Shopping	4.1%	4.1%	0%
Managing money	2.4%	1.8%	.6%
Using the telephone	1.2%	.6%	6%

SERVICE & FACILITY GAPS

Home Care

Need for Assistance with Activities of Daily Living

Task	Difficulty	Get Help	Difference
Bathing/showering	4.1%	1.8%	2.3%
Dressing	1.8%	.6%	.6%
Eating	1.8%	0%	1.8%
Getting in and out of bed	4.1%	.6%	3.5%
Walking	8.2%	2.4%	5.8%
Using/getting to the toilet	.6%	1.2%	*

- Some in-home support provided by Ready Care
- Growing population of elders means gap will get wider

Health Care Needs

Services & Facilities

1. Wellness & Education

- Wellness & Educational Program should be a focus for all clinics. Provide spaces & programs to support this. Active participation within the schools in the area is key.
- Define primary role of village clinics as preventative care clinics

2. Detox

- Include in wellness and education
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3. Outpatient Primary Care

- Facility upgrades needed to allow clinics to function better. (Space summary to follow)
- Primary care clinic at Gakona would provide better convenience and alleviate pressure on the staff at other village clinics

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Space Needs

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Information & Additional Resources

- Denali Commission webpage – www.denali.gov
  Technical assistance for plan development-
  - Carolyn Gove **Carolyn.gove@gmail.com** 907.276.4683
  - Noel Rea **Noel_Rea@health.state.ak.us** 907.269.5024

Space Needs Appendix

Space Needs

A. Denali Commission Clinic Space Guidelines

The Denali Commission recommends the following clinic square footage based upon community size:

Population:	*<100*	*100-500*	*500-750*	*750+ or serving multiple communities*
Primary Care	*1,500 Sq Ft*	*2,000 Sq Ft*	*2,500 Sq Ft*	*user defined*
*Dedicated Dental ** *	*0*	*360*	*360*	*user defined*
*Dedicated Behavioral Health** *	*0*	*220*	*320*	*user defined*
TOTAL	*1,500*	*2,580*	*3,180*	*user defined*

Space Needs

PROVIDERS	*Service Area*	*Population*	***Denali Recommended Size*** *Primary Care*	*Behavioral health*	*Dental Care*
CRNA	Whole Region	3120	user defined	user defined	user defined
CROSS ROAD	Whole Region	3120	user defined	user defined	user defined
VILLAGE OF GAKONA	Gakona Village	239	2000	220	360
MSTC	Mentasta Lake	142	2000	220	360
MSTC	Chistochina	93	1500	0	0
CHITINA	McCarthy, Chitina, Kenny Lake	300	2000	220	360

Space Needs

CRNA

User defined facility needs

	Quantity	SF	Total SF
Dental Clinic + support			1290
Health Services			2750
Behavioral Health			5040
		Sub total	*9080*
		Circulation & Net @ 45%	4086
		Sub total	13166
		Mechanical @ 8%	1053
		TOTAL	**14219**

Space Needs

Cross Road Medical Center

- Total additional need is 10,000 sf
  - defined in the Code & Conditions Survey on file with the Denali Commission

Space Needs

Gakona

Program as defined by user	Quantity	SF	Total SF
Behavioral Health	1	289	289
Wellness & Education	1	300	300
Primary Care	1	400	400
Admin	1	248	248
		Sub total	*1237*
		Circulation & Net @ 45%	557
		Mechanical @ 8%	143
		TOTAL	**1937**

Space Needs

MSTC- Mentasta Lake Clinic

Medium Facility Program- As defined by the Denali Commission for Communities of this size

	Quantity	SF	Total SF
Entry	2	50	100
Waiting/Reception	1	150	150
Trauma/Telemed/Exam	1	200	200
Office	1	150	150
Admin/Records	1	110	110
Pharmacy/Lab	1	80	80
Portable X-Ray	0		0
Wellness & Education	1	150	150
Telepsych Room	1	80	80
Storage	1	100	100
HC Toilet	2	60	120
Janitor's Closet	1	30	30
		Sub total	*1270*
		Circulation & Net @ 45%	572
		Mechanical @ 8%	147
		TOTAL	**1989**

Space Needs

MSTC- Chistochina Clinic

Small Facility Program- As defined by the Denali Commission for Communities of this size

	Quantity	SF	Total SF
Entry	1	50	50
Waiting/Reception	1	100	100
Trauma/Telemed/Exam	1	200	200
Office	1	150	150
Pharmacy/Lab	1	80	80
Wellness & Education	1	150	150
Telepsych Room	1	80	80
Storage	1	80	80
HC Toilet	1	60	60
Janitor's Closet	1	30	30
		Sub total	*980*
		Circulation & Net @ 45%	441
		Mechanical @ 8%	114
		TOTAL	**1535**

Space Needs

Chitina

Additional facility needs			
	Quantity	SF	Total SF
Medical/Dental Storage	1	250	250
Staff Offices	3	120	360
Pharmacy	1	120	120
X-Ray room	1	220	220
Audiology Lab	1	80	80
Training Room	1	340	340
		Sub total	*1370*
		Circulation & Net @ 45%	617
		Sub total	1987
		Mechanical @ 8%	159
		TOTAL	**2145**

**With new clinic, facility expansion not likely a top priority for Denali Commission funding