

**CERTIFICATE OF NEED REVIEW  
WRANGELL MEDICAL CENTER REPLACEMENT HOSPITAL**

**March 22, 2010**



**Sean Parnell  
Governor**

**William H. Hogan  
Commissioner**

**State of Alaska  
Department of Health and Social Services  
Division of Health Care Services  
Health Planning & Systems Development Section  
Certificate of Need Program**

**TABLE OF CONTENTS**

**BACKGROUND AND PROJECT DESCRIPTION** ..... 3

**REVIEW STANDARDS**

    General Review Standards Applicable to All CON Applications

        #1 Documented Need ..... 4

        #2 Relationship to Plans ..... 5

        #3 Stakeholder Participation ..... 5

        #4 Alternatives Considered ..... 6

        #5 Impact on Existing System ..... 6

        #6 Accessibility ..... 7

    Specific Review Standards

        Acute Care Hospital Services Review Standards and Methodology.....7

        Hospital Laboratory and Emergency Services: Review Standards and Methodology

            Hospital Laboratory Department Services ..... 8

            Hospital Emergency Department Services .....10

        Long-Term Nursing Care Review Standards and Methodology.....12

        Surgical Care: Review Standards and Methodology.....14

**PUBLIC COMMENT**.....14

**FINANCIAL FEASIBILITY AND COST TO MEDICAID**..... 15

**STAFF RECOMMENDATION**.....15

**APPENDICES**

APPENDIX A – Acute Care Hospital Services Methodology.....16

APPENDIX B – Long-Term Nursing Care Methodology.....17

APPENDIX C – Office of Rate Review.....18

## **CERTIFICATE OF NEED APPLICATION FOR REPLACEMENT OF WRANGELL MEDICAL CENTER**

### **BACKGROUND AND PROJECT DESCRIPTION**

The Wrangell Medical Center (WMC) was originally constructed in 1968. The long term care portion of the facility was opened in 1976. In 1989, the clinic, emergency, laboratory, and x-ray departments were added to the current facility. With each construction phase, changes were made to assure the facility was compliant with current building, life and safety codes. Other than a maintenance and storage facility added in 1992, and routine repairs and maintenance, the facility has remained unchanged for the past 20 years.

WMC is licensed as an eight bed rural primary care hospital including eight swing beds. The primary care unit is configured with four single bed rooms and two double bed rooms. WMC is also licensed as a 14 bed nursing home which consists of seven double bed rooms. The facility is approximately 28,000 square feet, 24,000 for the hospital and 3,400 for the long term care unit.

WMC is also designated as a Critical Access Hospital (CAH) as defined by Medicare requirements. A CAH must provide 24-hour emergency services with medical staff on-site, or on-call within 30 minutes of the facility, they cannot have over 25 acute care inpatient beds, they must maintain an average length of stay of 96 hours or less for their acute care patients, however, if these beds are used as swing beds there is no length of stay limit. They must also develop agreements with an acute care hospital or hospitals for patient referrals and transfers<sup>1</sup>.

In November 2009 the WMC submitted a Certificate of Need application for a \$25,427,743 replacement medical center to be located on land donated by the City of Wrangell a short distance from the current facility.

WMC is proposing a 39,000 square foot facility with eight primary care/swing beds. It is proposed that this unit will be constructed to provide eight single bed (private) rooms. The applicant is also proposing an increase of the long term care (nursing home) unit from 14 to 20 beds. This unit would be configured with one double bed room and the remainder as single bed rooms. Finally, the new facility would expand all other areas of the facility including the emergency department, the operating suite, and other ancillary departments.

The estimated completion date would be July 1, 2013.

---

<sup>1</sup> [www.raconline.org/info\\_guides/hospitals/cahfaq.php](http://www.raconline.org/info_guides/hospitals/cahfaq.php)

**REVIEW STANDARDS:**

**General Review Standards Applicable to All CON Applications**

***General Review Standard #1- Documented Need*** *The applicant documents need for the project by the population served, or to be served, including, but not limited to, the needs of rural populations in areas having distinct or unique geographic, socioeconomic, cultural, transportation, and other barriers to care.*

The applicant identifies its service area as the City of Wrangell and communities on northern Prince of Wales Island. This is a remote rural area in Southeast Alaska with limited, yet regular, air, and water transportation. Travel from Wrangell to other health care service involves hours on the Alaska Marine Highway ferry or a short air flight on Alaska Airlines. Both of these modes of transportation are often subject to delay due to weather and mechanical delays within southeast Alaska. The isolation of the community requires WMC to provide vital acute health care services for its residents. As a city owned and operated facility they provide service to all residents and seasonal tourists. WMC also has an agreement with the Southeast Alaska Regional Health Consortium (SEARHC) to provide emergency and acute care services to Alaska Natives and American Indians living in the Wrangell/Northern Prince of Wales Island area.

The applicant provided Alaska Department of Labor and Workforce Development current and projected population figures for this area through the year 2015<sup>2</sup>. The Wrangell area population is not expected to change significantly through 2015.

The applicant has demonstrated the need to provide emergency and acute care services for Wrangell residents as a designated Critical Access Hospital, based on the isolation of the area, and the limited transportation options for residents.

The applicant has also demonstrated its commitment to serve all patients regardless of ability to pay or residence through its admission policy.

This standard has been met.

---

<sup>2</sup> Wrangell Medical Center Certificate of Need Application November 2009, pg 18.

***General Review Standard #2 – Relationship to Applicable Plans:*** *The applicant demonstrates that the project, including the applicant’s long-range development plans, augments and integrates with relevant community, regional, state, and federal health planning, and incorporates or reflects evidence-based planning and service delivery. A demonstration under this standard should show that the applicant has checked with the department regarding any relevant state plan, with appropriate federal agencies for relevant federal plans, and with appropriate communities regarding community or regional plans.*

The Department’s Rural Health Plan<sup>3</sup>, approved by the Centers for Medicare and Medicaid Services (formerly the Health Care Financing Administration) addresses the goals and processes necessary for smaller rural hospitals to apply for and maintain CAH designation through the CMS Medicare Rural Hospital Flexibility Program. WMC followed these procedures to be designated as a CAH in July 2002.

The applicant also discusses portions of Healthy Alaskans 2010 which address access to health care issues in isolated area. Small, rural hospitals are essential providers of preventative services and primary care, as well as links to emergency care and transport.<sup>4</sup>

In the spring of 2006 NBBJ, Inc was funded by the Denali Commission and the Alaska Native Tribal Health Consortium to complete a service delivery and health facility space plan for the Wrangell area. The purpose of this study was to identify gaps in service and to provide recommendations for facility improvements in the community. This study was presented to the WMC Board to assist them in their local planning.

This standard has been met.

***General Review Standard #3 – Stakeholder Participation:*** *The applicant demonstrates evidence of stakeholder participation in planning for the project and in the design and execution of services.*

The NBBJ study involved individual interviews and surveys from healthcare providers and three regional meetings, held in Wrangell, to gather input from local and regional stakeholders and providers. The results of this study were presented to the community in August 2006.

The WMC Board is elected from residents in the Wrangell community during City and Borough of Wrangell elections. The City and Borough of Wrangell Mayor and Assembly have administrative and leadership responsibilities since the facility is City owned and operated.

---

<sup>3</sup> Alaska Rural Health Plan, revised 12/2001

<sup>4</sup> Healthy Alaskans 2010: Volume I – Targets for Improved Health. Chapter 15: Access to Quality Health Care, pgs 15-16.

Finally, WMC provides routine information and status reports to all Wrangell residents in regular newsletters distributed through the U.S. mail system. The applicant provided newsletters from the past two years. The planning process and decisions made regarding this project have been thoroughly discussed in these newsletters.

This standard has been met.

***General Review Standard #4 – Alternatives Considered: The applicant demonstrates that they have assessed alternative methods of providing the proposed services and demonstrates that the proposed services are the most suitable approach.***

Between January 2008 and September 2009 the WMC Board was in the process of examining options for the medical center. Two options were assessed: remodel and expand the current facility, or build a new facility. A comprehensive engineer's inspection was made of the existing facility which outlined areas needing repair and options for remodeling and expansion. This report included costs estimates for each option. It was estimated that remodeling and expanding the facility would cost more than building a new facility.

Additionally, the City of Wrangell would donate land close to the current hospital.

The decision was made to build a new facility based on estimates that it would cost less to build a new facility than to remodel and expand the existing building, the new site area would accommodate further expansion if necessary and finally, hospital services and patients would experience minimal, if any, disruption during the construction of a new facility.

This standard has been met.

***General Review Standard #5 – Impact on the Existing System: The applicant briefly describes the anticipated impact on existing health care systems within the project's service area that serve the target population in the service area, and the anticipated impact on the statewide health care system.***

WMC is the only hospital in the Wrangell area and, as discussed earlier, construction of a new facility to replace the existing facility upon completion will not interrupt services for the area and its residents.

There is no anticipated impact on the statewide health care system as no new services are proposed with the new facility.

This standard has been met.

**General Review Standard #6 – Access:** *The applicant demonstrates that the project’s location is accessible to patients and clients, their immediate and extended families and community members, and to ancillary services. This includes the relocation of existing services or facilities.*

The new facility will be built at a site that is relatively close to the current hospital. It will be located in the City of Wrangell with easy access by patients, their families, and the community via car or as a pedestrian.

This standard has been met.

**Specific Review Standards:**

**Acute Care Hospital Services**

**Acute Care Specific Review Standard #1 – Bed Need:** *Beds for acute hospital services for the state or service area will be within the limits calculated using the methodology below. An application will not be approved if bed need standards are exceeded.*

Wrangell Hospital Acute + Swing Bed Utilization							Average Daily Census (ADC) 2007-2009	Use Rate (population estimate: 2058)	Projected Bed Days 2017 (population projection: 2028)	Projected Average Daily Census	Projected Bed Need (PBN) 2017 (50% target occupancy)
		2007	2008	2009	2007-2009	Average 2007-2009					
Acute beds	days	333	304	356	993	331	0.91				
Swing beds	days	715	622	917	2254	751.3	2.06				
<b>Total</b>	<b>days</b>	<b>1048</b>	<b>926</b>	<b>1273</b>	<b>3247</b>	<b>1082.3</b>	<b>2.97</b>	<b>0.534</b>	<b>1082.9</b>	<b>2.9668</b>	<b>6</b>

(PBN=6 beds - for population between 1725 and 2220 at UR=0.534 days per resident person)

The Acute Care Hospital Services Methodology used in the above chart is located in Appendix A.

This chart illustrates an average daily census for the last three years (2007-2009) of 2.97 and a projected average daily census through calendar year 2017 of 2.97 based on usage and population estimates. The target occupancy rate for hospitals with less than 50 licensed beds is 50%. Based on this methodology, the projected bed need through 2017 would be six.

It should be noted that as a critical access hospital (CAH) WMC cannot exceed an average length of stay of 96 hours for acute care patients. However, WMC can use these acute care beds as swing beds for long term care patients with no length of stay limits<sup>5</sup>.

<sup>5</sup> [www.raconline.org/info\\_guides/hospitals/cahfaq.php](http://www.raconline.org/info_guides/hospitals/cahfaq.php)

The applicant is not requesting additional acute care/swing beds with this project, however, the acute care methodology was utilized to demonstrate bed need for this unit through 2017. Currently, WMC has four single bed rooms and two double bed rooms in this unit. The applicant plans to configure the new unit with eight single bed rooms. This should alleviate some of the problems with “staging” patients as discussed in the application and during the public meeting.

This standard is not applicable as no new beds are requested. WMC is licensed and has the ability to utilize these beds as either acute care or long term care beds to meet unique needs of a rural critical access hospital.

***Acute Care Specific Review Standard #2 – Population of 10,000 or less:*** *An applicant serving patients from a community with a population of 10,000 or less demonstrates that the transport of patients to or from those areas for medical care or services will be facilitated, directly or through coordinated efforts with other organizations.*

The applicant produced transfer and transport agreements with other facilities in Southeast Alaska: Southeast Alaska Health Consortium (Mt. Edgecumbe Hospital), Ketchikan General Hospital, and Bartlett Regional Hospital. Agreements with Harborview Medical Center and Virginia Mason Medical Center in Seattle Washington are also in place.

This standard has been met.

***Hospital Laboratory Department Services (Lab)***

***Lab Specific Review Standard #1 – Access:*** *The population served by a laboratory to be moved will continue to have reasonable access to the service at the new site, or will have reasonable access to comparable laboratory services in the community.*

The applicant intends to continue laboratory services in the current hospital prior to the completion of the replacement facility, and upon completion, in the replacement facility. Access to laboratory services will not be affected with by the proposed construction.

This standard is met.

***Lab Specific Review Standard #2 – Offsite Laboratory:*** *For an offsite laboratory replacement project, implementation will result in a substantial cost savings, cost avoidance, consolidation of underutilized facilities, or in other ways improves operational efficiency.*

This standard is not applicable as the applicant will not operate an offsite laboratory.



**Lab Specific Review Standard #3 – Redundant equipment:** *Redundant equipment is justified based on demand analysis or limited access to other laboratory equipment and services within the community.*

The applicant plans to move all current laboratory equipment to the replacement facility. There will be no redundant equipment purchased.

This standard is met.

**Lab Specific Review Standard #4 – Space needs:** *Accreditation reports and a visual inspection of the lab show a defined need to add space, redesign the laboratory, to make it more efficient and safe, ensure higher quality services, and correct functional problems that affect quality and efficiency.*

The applicant presented a July 2009 engineer's report which outlined deficiencies noted on inspection of the current facility. The report, using the 2006 Guidelines for Design and Construction of Healthcare Facilities by the American Institute of Architects Academy for Health, addressed deficiencies for each department of the hospital. No deficiencies were noted specific to the laboratory however general physical plant concerns such as deficiencies in floor loading, heating, and ventilation were issues in the laboratory department as well as the entire building. There were no reports from state licensing or accrediting bodies, aside from a copy of Wrangell Medical Center's current hospital license, in the application which outlines any deficiencies, space needs, or functional problems. CON staff inspected the current laboratory facility in March 2010 and can confirm there is a definite need for a redesign of the laboratory to make it more efficient and safe.

This standard is met due to the fact that this is a replacement laboratory. There will be no change in service, and a new laboratory department will address deficiencies in the physical plant, current inefficiencies, and space needs.

**Lab Specific Review Methodology:** *The department will use a net square feet per patient bed method as follows: Laboratory size will not exceed 50 net square feet per patient bed based on the projected number of beds that would be served by the laboratory or are requested in the application and recommended in the review document.*

The applicant presented plans to build a 1400 square foot laboratory. This was based on the assumption that a total of 28 beds would be approved by the Department.

Utilizing the methodology outlined for laboratories and based on the staff recommendation for this proposed facility to the Commissioner, a replacement laboratory cannot exceed 1,150 square feet: ***23 beds x 50 square feet = 1,150 square feet.***

**Hospital Emergency Department (ED)**

**ED Specific Review Standard #1 – Maintenance of a Stable & Efficient ED:** *The applicant demonstrates that the project promotes, or otherwise helps ensure, the maintenance of a stable and efficient emergency medical system.*

Wrangell Medical Center is the only emergency service provider for the Wrangell area. They have operated an emergency care department since the original facility was opened. As a CAH the applicant must provide 24-hour emergency services with medical staff on-site, or on-call within 30 minutes of the facility.

This standard has been met.

**ED Specific Review Standard #2 - Need:** *For the addition or expansion of general emergency services, a proposal will not be approved unless each emergency department treatment room will provide a minimum of 1,500 visits annually. The total number of emergency department treatment rooms (excluding specialized rooms such as cast/x-ray rooms, observation rooms, secure rooms and space for visiting physician clinics) approved will not exceed one room per 1,500 visits annually, based on utilization projections in the fifth year of operation. The department may approve additional space if the applicant documents use patterns, and submits data and analysis that show seasonal high peak use rates warranting additional treatment rooms.*

The application outlined their current emergency room usage and while their average emergency department visits per year (2006-2009) is 920 visits, the majority of the time there are two to three patient visits per day to the department. The applicant did show the emergency department did have days with up to eight patients in the department. There were a number of deficiencies noted by the engineer's report for the department including the fact that the current exam room is below the minimum space requirements under AIA guidelines. Additionally, under the AIA guidelines, there currently is no airborne infection isolation room.

The replacement department is proposed to contain two 140 square foot exam rooms with a trauma room.

This standard is met as the applicant was able to document the need for an additional based on current department use and the need for WMC as a critical access hospital to provide emergency services.

**ED Specific Review Standard #3 – Fast Track Services:** *For the addition or expansion of fast track emergency services within a facility, a proposal will not be approved unless the applicant demonstrates that:*

- a. the fast track space will have at least one physician, advanced nurse practitioner, or physicians' assistant assigned full-time to the service; and*
- b. a minimum of two fast track rooms are needed, each anticipated to accommodate at least 1,500 visits per room per year by the fifth year of operation; and*
- c. remaining general emergency service rooms will continue to handle a minimum of 1500 visits annually.*

There are no fast track rooms proposed in this application, therefore this standard does not apply.

**ED Specific Review Standard #4 – Additional space in the Department:** *For a proposal for additional space in the hospital emergency department, the applicant must perform a size-by-functional-need survey and analysis for additional space that demonstrates efficient use of the space.*

This standard does not apply as there is no additional space requested, aside from the second treatment room reviewed in Standard #3, in the application.

**ED Specific Review Methodology:**

This methodology was not utilized in this review.

**Long-Term Nursing Care: Review Standard and Methodology (LTC)**

**LTC Specific Review Standard #1 – New freestanding LTC facility:** *A new freestanding long-term nursing facility will not be approved unless the applicant has demonstrated need for a minimum of 40 beds.*

This standard does not apply as this is not a freestanding LTC facility.

**LTC Specific Review Standard #2 – New long-term nursing units co-located with hospitals:**

*New long-term nursing units co-located with hospitals will not be approved unless the applicant demonstrated a need for a minimum of 15 beds. The department may approve a smaller number of beds if the applicant demonstrates use patterns, and submits data and analysis to justify a smaller unit.*

This standard does not apply. This is not a new long-term nursing unit. Long term care services have been provided by WMC since 1976.

***LTC Specific Review Standard #3 – Expansion of licensed capacity:*** *To be considered for approval to expand licensed capacity, a freestanding long-term nursing care facility must have an average annual occupancy of at least 90%, and co-located long-term nursing care units must have an average annual occupancy rate of at least 80%, during the preceding three years.*

The applicant provided information on use over the past three years (2006-2008) stating their average daily census has been 12 patients<sup>6</sup>. 80% of the current number of licensed beds is 11.2.

The current LTC unit consists of seven double bed rooms which can cause difficulty when placing patients in the unit. The applicant proposed a new unit in the new facility that would contain one double bed room with the rest as single bed rooms. This should alleviate some of the problems with “staging” patients as discussed in the application and during the public meeting.

This standard is met. The applicant can be considered for expansion of their licensed capacity.

***LTC Specific Review Standard #4 – More than one LTC facility in a service area:*** *In a service area with more than one long-term nursing care facility, all facilities must have had an average annual occupancy of at least 90% during the preceding three years before additional beds are approved.*

There are no additional LTC nursing care facilities in the Wrangell area.

This standard does not apply.

***LTC Specific Review Standard #5 – Most cost-effective, least-restrictive setting possible:*** *In the interest of serving individuals in the most cost-effective, least restrictive setting possible, there must be a combination of at least one assisted living bed or adult day care slot for each existing and proposed new long-term nursing care bed. For a community with a population of 10,000 or less, the department may approve beds on a case-by-case basis.*

---

<sup>6</sup> Wrangell Medical Center Certificate of Need application, November 2009, pg 59.

Wrangell currently has 14 long term care beds, all located in the Wrangell Medical Center. According to the Division of Senior and Disability Services the Wrangell area currently has 3 assisted living beds and no adult day care services.

Analysis of other communities in the area show the following for licensed nursing home and assisted living beds:

Ketchikan – population: 7500

20 LTC beds

50 Assisted living beds

Sitka – population: 8600

15 LTC beds

79 Assisted living beds

Petersburg – population: 3000

15 LTC beds

15 Assisted living beds

Of note: while obtaining information for this review Petersburg Medical Center stated that their recent LTC bed occupancy has been 50% due to the fact that patients are being discharged to home or to the assisted living facility in Petersburg.

The NBBJ study completed in 2006 stated that there was a gap or indentified need for assisted living services for the elderly in the Wrangell area. They identified the need of as many as 63 beds by the year 2015.

WMC is a licensed home health agency but the application does not describe the service or its use, nor does it outline any discussions or proposals within the community to address the needs for the aging population with regard to alternatives to nursing home placement, costs associated with these alternative settings and the least restrictive care setting to meet the physical, social, and medical needs of the elderly.

This standard is not met.

### **LTC Methodology:**

See Appendix B for the methodology and calculation chart.

The applicant is requesting an increase of six LTC beds for a total of 20 licensed LTC beds. Based on the methodology for long-term nursing care (Appendix B) the need for additional bed capacity through calendar year 2017 would be no more than 17. It is recommended that this

applicant be approved for an increase of one LTC licensed bed for a total of 15, and due to the fact that WMC is currently licensed for eight acute care/swing beds with a demonstrated need through 2017 of six, swing beds could be used, should the need arise, to meet the estimated bed need through 2017.

**Surgical Care: Review Standards and Methodology:**

These standards and methodology were not reviewed as the applicant is not proposing any new surgical capacity.

**PUBLIC COMMENT**

The written public comment period for this project was January 21, 2010 through February 20, 2010. Five written comments were received: Ketchikan General Hospital, Petersburg Medical Center, Mt. Edgecumbe Hospital, Bartlett Regional Hospital, and Dr. Bob Urata, Medical Director for WMC. All spoke in favor of the applications and all were in favor of WMC increasing their long term care bed capacity.

A public meeting was held in Wrangell on February 18, 2010. Sixteen individuals attended with fourteen providing comments for the record. A majority of those providing public comment were associated with the hospital in some way either as an employee, a WMC Board member, or City of Wrangell elected official. Aside from their official capacity, all were at one time a patient at WMC. All spoke in support of the need for a new facility because of the problems associated with maintaining an older building. All were in favor of configuring the units with single bed rooms, and all spoke in favor of expanding the square footage of ancillary departments. Five spoke of the need to increase the number of long term care beds to 20 if not more.

**FINANCIAL FEASIBILITY AND COST TO MEDICAID**

The estimated cost totals for this project are approximately \$25.5 million.

The applicant intends to finance \$16.8 million of this project by issuing debt to be repaid by hospital operations. The remainder of the construction funds will come from reserves and

grants. It is not clear if grant funding has already been awarded as they were not mentioned in the application.

The applicant presented current and projected financials.

The increased costs to Medicaid for inpatient (acute care) costs will rise only moderately through 2017 as no new beds or services are proposed. The impact to outpatient services will not be significant. The impact of the long-term care unit and its proposed expansion will, however, be significant. The Office of Rate Review estimates an increase of approximately \$1.3 million per year in Medicaid costs alone for the additional six beds requested by the applicant.

The analysis by the Office of Rate Review is in Appendix C.

### **STAFF RECOMMENDATION**

Based on analysis of the application against established standards and methodologies, staff recommends the following Certificate of Need be granted to Wrangell Medical Center:

- The applicant is approved to expend \$25.4 million to construct a new 39,000 square foot hospital in Wrangell Alaska.
- The approved 39,000 square foot facility includes an eight bed acute care/swing bed unit, a 15 bed long-term nursing care unit, a 1,150 square foot laboratory, a two room emergency department, and one surgical suite.

**APPENDIX A – Acute Care Review Methodology**



## II. Acute Care Hospital Services: Review Standards and Methodology

### *Review Standards*

After determining whether an applicant has met the general review standards in Section I of this document, the department will apply the following service-specific standards in its evaluation of an application for a certificate of need that involves the addition, renovation, replacement, or relocation of acute care hospital beds:

1. Beds for acute care hospital services for the state or service area will be within the limits calculated using the methodology below. An application will not be approved if bed need standards are exceeded.
2. An applicant serving patients from a community with a population of 10,000 or less demonstrates that the transport of patients to or from those areas for medical care or services will be facilitated, directly or through coordinated efforts with other organizations.

### *Review Methodology*

The department will use the following formula to determine the need for acute care hospital services:

► **STEP ONE:** Determine the projected inpatient caseload for the population to be served using the formula:

$$C = (P_s \times UR_s) \times SAS$$

**C** (caseload) = the number of inpatient days of hospital care required by the service area population in the fifth year from the project implementation date. Both total inpatient caseload and service specific caseload projections will be used if the application is for a specific service (e.g. general medical/surgical, intensive care, pediatrics, acute rehabilitation or obstetrical).

**P<sub>s</sub>** (projected state population) = the official state population cohort projection appropriate to the inpatient service proposed in the fifth year following implementation of the project.

**UR** (use rate) = the current utilization rate (the average annual number of inpatient days of hospital care used during the preceding three years divided by the population ).

**SAS** (service area share) = the proposed service area's current share of the population to be served, as of the most recent geographic population estimates. If there is public information about service area population changes expected over the planning horizon, such as a military base closing, or a major economic project such as a new mine, the service area share estimate may be modified with explanation to reflect the expected change.

► **STEP TWO:** Determine the projected average daily inpatient census for the service using the formula:

$$ADC = C / SA$$

**ADC** (average daily census) = average number of inpatients in the proposed hospital service on any given day

**C** (caseload) = the number of inpatient days of hospital care for the service required by the population to be served in the fifth year from the project implementation date

**SA** (service availability) = defined as 365 days

► **STEP THREE:** Determine the projected number of hospital beds needed for the service by using the formula:

$$PBN = ADC / TO$$

The projected number of hospital beds needed (PBN) = Service average daily census (ADC) divided by the service target occupancy (TO) factor:

**PBN** (projected bed need) = Total number of hospital beds needed for service area

**ADC** (average daily census) = average number of inpatients in the proposed hospital service on any given day

**TO** (target occupancy) = Service target occupancy rate for hospital beds, defined as:

**General medical-surgical beds:<sup>2</sup>**

Hospitals with more than 100 licensed beds:	75%
Hospitals with 50 to 100 licensed beds:	65%
Hospitals with fewer than 50 licensed beds:	50%

**Intensive care beds:**

Hospitals with 100 or more licensed beds:	65%
Hospitals with fewer than 100 licensed beds:	50%

**Pediatric beds:**

Hospitals with 100 or more licensed beds:	65%
Hospitals with fewer than 100 licensed beds:	50%

**Acute rehab beds:**

Hospitals with 100 or more licensed beds:	80%
Hospitals with fewer than 100 licensed beds:	65%

**Obstetrical beds:<sup>3</sup>**

Hospitals with 100 or more licensed beds:	65%
Hospitals with fewer than 100 licensed beds:	50%

<sup>2</sup> For a small facility that does not have specialized units, the general medical-surgical occupancy rates apply.

<sup>3</sup> Includes birthing rooms, labor beds, delivery beds, and LDRP beds

► **STEP FOUR:** Calculate the unmet bed need (UBN) by type of service by subtracting the existing inventory and CON-approved number of the proposed type of hospital beds (IHB) from the total hospital bed need (PBN) for the proposed service area:

$$\text{UBN} = \text{PBN} - \text{IHB}$$

**PBN** (projected bed need) = Total number of hospital beds by service category needed for service area

**IHB** (inventory hospital beds) = Number of existing beds and CON-approved hospital beds by service category in the proposed service area.

**APPENDIX B – Long-Term Nursing Care Review Methodology**

<b>Long Term Care Facility Name: Wrangell Community Hospital</b>					
<b>Bed Days for Calendar Year</b>					
<b>Year</b>	<b>Total</b>	<b>Age 0-64</b>	<b>Age 65-74</b>	<b>Age 75-84</b>	<b>Age 85+</b>
2009	5,049	886	148	1,359	2,656
2008	5,352	1,010	592	1,640	2,110
2007	5,491	545	787	1,357	2,802
Total	15,892	2,441	1,527	4,356	7,568
avg 2005-2007	5297	814	509	1452	2523
<b>Population, Use Rate, and Projections</b>					
avg pop Wrangell est	2027	1679	208	98	46
avg days per person	2.61	0.48	2.45	14.88	54.47
2010 pop projections	2,096	1,749	213	88	46
2015 pop projections	2,050	1,638	270	98	44
2017 pop projections	2,028	1,589	284	114	42
projected bed days 2010	5159	848	522	1309	2481
projected bed days 2015	5322	794	659	1463	2406
projected bed days 2017	5440	770	695	1700	2275
<b>Projected Average Daily Census</b>					
	<b>Avg. Daily Census (Projected)</b>	<b>90% Occupancy -- needed beds</b>	<b>Approvable Beds</b>		
2010	14	15.7	16		
2015	15	16.2	17		
2017	15	16.6	17		

## *Review Methodology*

The department will use the following formula to determine need for long-term nursing home beds:

► **STEP ONE:** Determine the projected long-term nursing care caseload using the formula:

$$C = CASU$$

C (caseload) = the average daily census of long-term nursing care patients five years from the project implementation date

**Average Daily Census** = patient days per year/365<sup>4</sup>

**CASU** (composite age specific use) = defined as the cumulative average daily census of long-term nursing care patients per 1,000 persons for the age groups: 0 – 64 years, 65 to 74 years, 75 to 84 years, and 85 years and over, five years from implementation of the project, calculated as follows:

$CASU = (UR_{<65} \times PP_{<65}) + (UR_{65-74} \times PP_{65-74}) + (UR_{75-84} \times PP_{75-84}) + (UR_{>85} \times PP_{>85})$  where:

**UR<65** = the average nursing home bed use rate of the service area population aged 0 to 64 years for the preceding three years

**PP<65** = the projected population aged 0 to 64 years for the fifth year from the project implementation date

**UR65•74** = the average nursing home bed use rate of the population aged 65 to 74 years for the preceding three years

**PP65•74** = the projected population between 65 and 74 years of age for the fifth year from the project implementation date

**UR75•84** = the average nursing home bed use rate of the population aged 75 to 84 years for the preceding three years

**PP75•84** = the projected population between 75 and 84 years of age for the fifth year from the project implementation date

**UR>85** = the average nursing home bed use rate of the population 85 years of age and older for the preceding three years

**PP>85** = the projected population 85 years of age and older for the fifth year from the project implementation date

---

<sup>4</sup> Until data set is available to calculate age specific use rates, daily census on July 1 of each year, or an average of the daily census counts on the first day of every month, will be used to estimate age-specific average daily census counts.

► **STEP TWO:** Determine the projected number of nursing home beds required to meet projected demand using the formula:

$$\text{PBN} = \text{C} / \text{NHTO}$$

**PBN** = projected nursing home bed need

**C** (caseload) = the average daily census of long-term nursing care patients five years from the project completion date

**TO** = nursing home target occupancy, defined as 90% (0.90)

► **STEP THREE:** For service area bed need projections, multiply projected bed need by the current service area share of the population to be served aged 65 and over:

$$\text{PBN}_{\text{sa}} = \text{PBN} \times \text{SAS}$$

**SAS** (service area share) = the proposed service area's current share of the population to be served, as of the most recent geographic population estimates. If there is public information about service area population changes expected over the planning horizon, such as a military base closing, or a major economic project such as a new mine, the service area share estimate may be modified with explanation to reflect the expected change.

Determine unmet nursing home bed need, if any, by subtracting the number of existing licensed and CON-approved beds from the number of beds projected to be needed in the proposed service area.

**APPENDIX C – Office of Rate Review**

# STATE OF ALASKA

SEAN PARNELL, GOVERNOR

3601 C Street, Suite 978  
Anchorage, AK 99503  
Phone: (907) 334-2464  
FAX: (907) 334-2220

## DEPT. OF HEALTH AND SOCIAL SERVICES

### OFFICE OF RATE REVIEW

#### MEMORANDUM

**Date:** March 5, 2010

**To:** Karen Lawfer  
CON Coordinator

**From:** Jack Nielson  
Executive Director

**Subject:** Certificate of Need (CON) Review for Wrangell Medical Center

Wrangell Medical Center (WMC) is a designated critical access hospital (CAH) owned and operated by the City and Borough of Wrangell (Wrangell). It is currently licensed for 8 acute care beds and 14 long-term care (LTC) beds. Due to the cost of renovating and the disruption it would cause, Wrangell has elected to construct a replacement hospital on a site located less than a mile from the current location. The planned replacement facility for WMC will contain approximately 39,000 square feet and will include expanded areas for all departments of the hospital. The new facility will provide 8 acute care/swing beds, 20 LTC beds, an expanded emergency department, and operating room, and expanded ancillary services.

It is estimated that the replacement facility will cost about \$25.4 million. WMC intends to finance approximately \$16.8 million of the cost by issuing debt to be repaid by hospital operations, with the remainder of funds coming from reserves and grants. Total interest expense is estimated to be \$15.7 million paid over a 25 year period. Completion date is anticipated to be July 1, 2013.

Based on the information provided by WMC in their certificate of need application, the estimated impact of the new facility to the Medicaid program for the periods below are:

	2014	2015	2016	2017
Long-Term Care	\$ 2,506,214	\$ 2,917,739	\$ 2,917,739	\$ 2,917,739
Inpatient	305,458	343,984	343,984	343,984
Additional Cost	\$ 2,811,672	\$ 3,261,723	\$ 3,261,723	\$ 3,261,723

While inpatient costs rise moderately, the long-term care revenue reflects not only the cost of the new facility but also the increase of an additional six long-term care beds. The additional beds alone account for approximately \$1.3 million per year. According to projections, impact to outpatient services is not significant.

In the review of the assets being purchased listed in the CON application, it was noticed that a pick-up truck and snow-plow were included. While this type of purchase may be allowable to a limited extent for Medicare/Medicaid purposes, staff believes that this type of equipment purchase does not fit with the intent of the CON statutes and regulations.



Wrangell Medical Center CON Memo  
Page 2

This facility has a limited population base from which to draw patients from. The proposed project is very ambitious and staff wishes the facility success in their financing and payment responsibilities. We must remind the facility of the provisions of 7AAC 07.070(i) which states:

(i) Approval of a certificate of need does not imply any guarantee of federal, state, or private money, including Medicaid payments or grant awards, and does not imply any guarantee of profitability.