HAWAII STATE HEALTH PLANNING AND DEVELOPMENT AGENCY

ADMINISTRATIVE APPLICATION – CERTIFICATE OF NEED PROGRAM

Application Number: #07-27A

Applicant: Hilo Medical Center
1190 Waianuenue Avenue
Hilo, Hawaii 96720

Phone: 808 974-4700

Project Title: Addition of four medical/surgical and four level II neonatal intensive care unit (NICU) beds

Project Address: 1190 Waianuenue Avenue, Hilo, Hawaii

1. **TYPE OF ORGANIZATION**: (Please check all applicable)

Public	X
Private	
Non-profit	
For-profit	
Individual	
Corporation	X
Partnership	
Limited Liability Corporation (LLC)	
Limited Liability Partnership (LLP)	
Other: _____	

2. **PROJECT LOCATION INFORMATION**

A. Primary Service Area(s) of Project: (please check all applicable)

Statewide:	
O`ahu-wide:	
Honolulu:	
Windward O`ahu:	
West O`ahu:	
Maui County:	
Kaua`i County:	
Hawai`i County:	X

3. **DOCUMENTATION** (Please attach the following to your application form):

A. Site Control documentation (e.g. lease/purchase agreement, DROA agreement, letter of intent) **N.A., THIS IS THE EXISTING SITE FOR HILO MED. CNTR**
B. A listing of all other permits or approvals from other government bodies (federal, state, county) that will be required before this proposal can be implemented (such as building permit, land use permit, etc.) **NEW LICENSE FROM OHCA FOR CHANGED BED COUNT**
C. Your governing body: list by names, titles and address/phone numbers **ATT. A**
D. If you have filed a Certificate of Need Application this current calendar year, you may skip the four items listed below. All others, please provide the following:
   - Articles of Incorporation
   - By-Laws
   - Partnership Agreements
   - Tax Key Number (project's location)

ALL INFORMATION PREVIOUSLY SUBMITTED WITH CON #07-16A

4. **TYPE OF PROJECT.** This section helps our reviewers understand what type of project you are proposing. Please place an "x" in the appropriate box.

	Used Medical Equipment (over $400,000)	New/Upgraded Medical Equip. (over $1 million)	Other Capital Project (over $4 million)	Change in Service	Change in Beds
Inpatient Facility				X	X
Outpatient Facility					
Private Practice					

5. **BED CHANGES.** Please complete this chart only if your project deals with a change in your bed count and/or licensed types. Again, this chart is intended to help our reviewers understand at a glance what your project would like to accomplish. Under the heading "Type of Bed," please use only the categories listed in the certificate of need rules.

Type of Bed (**acute only**)	Current Bed Total	Proposed Beds for your Project	Total Combined Beds if your Project is Approved
Medical/Surgical	87	+4	91
Critical Care	11	0	11
Obstetric	20	0	20
Psychiatric	20	0	20
NICU level II	0	+4	4
TOTAL	138	+8	146

6. PROJECT COSTS AND SOURCES OF FUNDS

A. List All Project Costs:

AMOUNT:

1.	Land Acquisition	_____
2.	Construction Contract	_____
3.	Fixed Equipment	_____
4.	Movable Equipment	_____
5.	Financing Costs	_____
6.	Fair Market Value of assets acquired by lease, rent, donation, etc.	_____
7.	Other: _____	_____

TOTAL PROJECT COST: **-$0-**

B. Source of Funds

1.	Cash	_____
2.	State Appropriations	_____
3.	Other Grants	_____
4.	Fund Drive	_____
5.	Debt	_____
6.	Other: _____	_____

TOTAL SOURCE OF FUNDS: **-$0-**

7. **CHANGE OF SERVICE:** If you are proposing a change in service, then please briefly list what services will be added/modified. Be sure to include the establishment of a new service or the addition of a new location of an existing service. Please reference the Certificate of Need Rules Section 11-186-5 for the categories of services. If you are unable to determine which category best describes your project, please consult with agency staff.

Hilo Medical Center proposes to establish a Neonatal Intensive Care Unit (NICU) service as provided under Section 11-186-5(1)(D) Hawaii Administrative Rules, through the establishment of a 4 bed level II (intermediate level) NICU.

8. **IMPLEMENTATION SCHEDULE:** Please present a projected time schedule for the completion of this project from start to finish. Include all of the following items that are applicable to your project:

See page 7

a) Date of site control for the proposed project,
b) Dates by which other government approvals/permits will be applied for and received,
c) Dates by which financing is assured for the project,
d) Date construction will commence,
e) Length of construction period,
f) Date of completion of the project,
g) Date of commencement of operation

Please remember that the Agency does monitor the implementation of Certificates approved. Non-implementation of a project as described in your application may result in a fine and/or withdrawal of the certificate of need.

9. **EXECUTIVE SUMMARY:** Please present a brief summary of your project. In addition, provide a description of how your project meets each of the certificate of need criteria listed below. If a new location is proposed, please attach an easy to read map that shows your project site.

See page 7

a) Relationship to the Hawai`i Health Performance Plan (H2P2), also known as the State of Hawai`i Health Services and Facilities Plan.
b) Need and Accessibility
c) Quality of Service/Care
d) Cost and Finances (include revenue/cost projections for the first and third year of operation)
e) Relationship to the existing health care system
f) Availability of Resources.

10. **Eligibility to file for Administrative Review.** This project is eligible to file for Administrative review because: (Check all applicable)

____ It involves bed changes, which will have a capital expense of $1,000,000 or less, and which will have an increased annual operating expense of less than $500,000.

____ It involves service changes which will have a capital expense of $1,000,000 or less, and which will have an increased annual operating expense of less than $500,000.

____ It is an acquisition of a health care facility or service, which will result in lower annual operating expenses for that facility, or service.

____ It is a change of ownership, where the change is from one entity to another substantially related entity.

____ It is an additional location of an existing service or facility.

__X__ The applicant believes it will not have a significant impact on the health care system.

8. Implementation Schedule

NICU	
Service begins	January 1, 2008
Licensure	January 1, 2008
+4 med/surg beds	
Open additional beds	On CON approval
Licensure	On CON approval

9. Executive Summary

NICU. Hilo Medical Center (HMC) proposes to establish a 4 bed intermediate level (Level IIA) Neonatal Intensive Care Unit (NICU) at its Hilo facility. Currently there is no such service on the Island of Hawai`i.

The goals of the project:

- To provide top quality neonatal services without compromise at HMC.
- Develop a seamless system of neonatal intervention from resuscitation and stabilization through transport to a tertiary unit in which quality of care is equal in all phases of care.

Currently the Island of Hawai`i accounts for the majority of neonatal transports to Kapiolani Medical Center for Women and Children (hereinafter "Kapiolani"). The Physician group, Kapiolani Medical Specialists, and individuals from Queen's Medical Center and Kaiser Medical Center have been actively involved in the development of this proposed program at HMC.

The service will be available to the entire island, although we expect that it will mainly serve those people now being served at HMC and North Hawaii Community Hospital ("North Hawaii") in Waimea. Between these two facilities there are about 1,700 births per year (1117 at HMC in 2006 and about 50 per month at North Hawaii).

Successful care of neonates at level II is not a matter of high technology involving sophisticated equipment. Rather, it is a matter of highly skilled personnel. The basic interventions of effective airway management, vascular access and fluid resuscitation, administration of surfactant, treatment of hypoglycemia, and avoidance of hypothermia can be provided in a community hospital setting with the proper personnel. Some of these personnel already exist at HMC, some are already in training, and some are already recruited and just need to be engaged when the CON is approved.

HMC is already providing basic level II care to about 50 neonates per year, with an average length of stay of about 4 days. In 2006, there were 75 "special care"

HMC is already providing basic level II care to about 50 neonates per year, with an average length of stay of about 4 days. In 2006, there were 75 "special care" babies born at HMC. HMC was able to care for 51 of these, with the remaining 24 being transferred to Kapiolani. These 24 required either a higher level of level II care than HMC could provide, or the level III care available only at Kapiolani. Establishing the formal level II NICU will allow us to care for even more infants on their home island, and to care for them better. We expect that, in addition to infants born at HMC, we will also care for some of the infants born at North Hawaii, and perhaps even a few from Kona Community Hospital ("Kona"). We estimate that in the first year of operation we will care for 63 infants and by the third year of operation we will care for 89.

The level II NICU will be established within existing space in our current nursery. The only additional equipment we need will be two incubators, monitors and high flow nasal canula. Thus, there will be no capital expenditure involved. The personnel we need are already on staff, committed or are in training.

We believe that there is little question about the need for, quality, economics and safety of the proposed NICU service.

+4 med/surg beds. In 2004, SHPDA approved our CON application #04-22A under which we deleted 11 pediatric beds in the Malama Unit. The proposal was to temporarily use the unit for physician offices. In the application we stated our expectation that by 2007 or 2008 the physicians would move out and that we would propose to reopen Malama as an 11 bed medical/surgical unit. Our expectation was accurate, and we have already reopened 7 beds in the unit under the CON exemption provision in Hawaii Revised Statutes 323D-54(9). We would like to use this current application as the vehicle by which we can open the remaining 4 beds.

- Relation to the H2P2. The H2P2 establishes various occupancy rates for medical/surgical beds, which would permit a hospital to add more beds. In the case of HMC, the capacity threshold in the H2P2 is 80%. In fiscal year 2006-07, HMC had an occupancy rate of 91.4% in its medical/surgical beds. Thus, this proposal meets the provision of the H2P2.
- Need and accessibility. There is a need for the additional 4 beds as indicated by the relatively high (91.4%) occupancy rate. The unit in question, which now has 7 med/surg beds, is currently used as an overflow unit. There are times when the hospital is so full that patients are delayed in the emergency room or accommodated in short stay surgery while waiting for a bed to become available. These 4 beds will help meet the need. As with all our services, these beds will be accessible to all in need.
- Quality. Quality will be assured by our existing quality procedures.

- Cost and finances. There are no financial implications from the addition of these 4 beds. There is no capital expense, and there is no need for additional staff, equipment or materials. Revenue is unchanged since we already accommodate the patients anyway, albeit sometimes having to hold them in other areas.
- Relationship to the existing system. The proposal enhances the existing system by making beds available in a timely manner and by giving HMC more flexibility in serving our patients.
- Availability of resources. No additional staff or financial resources are required.

The rest of this application presents the details on the NICU unit.

a. Relationship to the Hawaii Health Performance Plan (H2P2), also known as the State of Hawaii Health Services and Facilities Plan.

The NICU proposal is consistent with the H2P2-stated goals and objectives for realizing the Hawai`i health care vision. The H2P2 goals include: increasing "the span of a healthy life for Hawaii residents," reducing "health disparities among Hawaii residents," and achieving "equitable and effective access at a reasonable cost for all Hawaii residents to health services that are responsible to the holistic needs of community's members." This proposal will reduce disparities and further equitable access simply by making the service available on-island for Big Island residents.

The H2P2 has two capacity threshold guidelines for NICU beds:

1. "For new or additional NICU beds, the overall average annual occupancy of the total number of existing Level II and Level III beds in the service area is at least 80 percent." Since there are no NICU beds at all in HMC's service area (the Island of Hawaii), this threshold is not applicable.

2. "NICU services are planned on a regional basis with linkages with obstetrical services, with a single NICU (Level II or Level III) containing a minimum of 15 beds. The minimum size of a Level II unit may be adjusted downward when travel time to an alternate unit is a serious hardship due to geographic remoteness." HMC is proposing a 4 bed Level II unit. Although this does not meet the 15 bed threshold, the downward adjustment is justified by the island's geographic remoteness relative to the Honolulu NICU units, and the travel time to Honolulu.

b. Need and Accessibility

Need. HMC proposes to meet the needs of neonates requiring the care available at a Level IIA unit as established by the American Academy of

Pediatrics ("AAP") (please see Attachment B). Briefly, this includes the capabilities to:

- Resuscitate and stabilize preterm and/or ill infants before transfer to a facility at which newborn intensive care is provided;
- Provide care for infants born at more than 32 weeks gestation (normal gestation is 37 weeks) and weighing 1500 or more grams who
    - have physiologic immaturity such as apnea of prematurity, inability to maintain body temperature, or inability to take oral feedings, or
    - who are moderately ill with problems that are anticipated to resolve rapidly and are not anticipated to need subspecialty service on an urgent basis
- Provide care for infants who are convalescing from intensive care;

Note: a Level II**B** NICU would also provide mechanical ventilation for brief durations (less than 24 hours) or continuous positive airway pressure (CPAP). HMC will not provide this service to infants it keeps in Hilo in its II**A** NICU, but may provide it for stabilizing infants prior to transfer to Honolulu. HMC will provide high flow nasal canula.

We will meet these needs in increments.

During the first six months of operation, while staff is completing additional training, we expect to serve only those level II infants we are currently serving. Based on HMC's actual experience for 2006, this is an annual rate of 51 patients.

Beginning in the second six months, we will begin to serve additional infants that are now being sent to Honolulu, but which could be cared for in our own upgraded unit. This would include infants down to 34 weeks gestation. Also at this time we expect to care for qualified infants being born at North Hawaii Community Hospital and, to a lesser extent, some from Kona Community Hospital. We expect that altogether this would be an additional 20 infants annually.

Within 18 months of establishing the NICU, we expect to be fully operational, which means we would be able to serve infants down to 32 weeks gestation who meet the criteria established by AAP. This would add 7 infants annually.

The table below illustrates our projections for the first three calendar years of operation. All the numbers increase as we take more difficult patients and begin to receive patients from North Hawaii and Kona.

HILO MEDICAL CENTER LEVEL II NICU
UTILIZATION PROJECTIONS FOR 2008 -- 2010

	2008	2009	2010
Admissions	63	82	89
Average Length of Stay	5.75	7	7.9
Patient Days	362.5	616	706
Average Daily Census	.99	1.78	1.93

Accessibility. The proposed service would be accessible to any infant that meets the criteria for a level IIA NICU. HMC provides service to all patients, including low income persons, racial and ethnic minorities, women handicapped persons, other underserved groups and the elderly.

Of course, the major impact on accessibility is simply the result of establishing the service on the Big Island. Big Island residents will be able to access the service on their home island and will not have to go off-island for necessary care.

c. Quality of Service/Care

Hilo Medical Center is certified by Medicare and Medicaid, and has a history of providing quality care. The NICU will be in full compliance with the policies and standards established by the American Academy of Pediatrics (see Attachment B).

The quality of care for Big Island residents will be vastly improved under this proposal simply by establishing level II NICU service on the island.

d. Cost and Finances

There is no capital cost involved. The level II NICU will be established within existing space in our current nursery, and will require no major renovation. The only additional equipment we need will be two incubators, monitors and high flow nasal canula. This equipment will be "expensed" as an operating cost, not a capital cost.

The table below shows that the project is financially feasible. That is, after the first year, the operating revenues will exceed operating expenses. In 2008, the first year of operation, we project a total net income of $663,424, growing to $900,214 in 2010. There is an operating loss of $86,026 in the first year, but the profits in the second and third year make up this deficit.

Big Island infants who need level II care, and their parents, will no longer have to travel to O`ahu for service, thus saving the air ambulance expenses

for the infants as well as travel-related expenses for family members who may travel to O`ahu to be with the infant.

HILO MEDICAL CENTER
PROJECTIONS OF NEW REVENUES AND EXPENSES
RESULTING FROM
LEVEL II NICU

	FY 2008	FY 2009	FY 2010	TOTAL
NEW REVENUE				
New professional revenue	390,552	415,789	438,681	1,245,022
New technical revenue	272,871	377,962	461,533	1,112,366
Total new revenue	**663,424**	**793,751**	**900,214**	**2,357,388**
NEW EXPENSES				
Professional salaries	566,000	582,980	600,469	1,749,449
HMC labor and training	123,450	116,373	119,441	359,264
Equipment	60,000	20,000	20,000	100,000
Total new expenses	**749,450**	**719,353**	**739,911**	**2,208,713**
Net profit/loss	**-86,026**	**74,398**	**160,303**	**148,675**

HMC NICU pro forma 3

e. Relationship to the Existing Health Care System

The proposal will strengthen the existing health care system by filling a critical gap in care delivery. Dependence on medical transport and Oahu facilities is reduced, and efficient access to safe, effective level II services will be made available to the Big Island community.

The unit will also benefit the statewide system, especially Kapiolani, which is sometimes overcrowded in its NICU. Kapiolani fully supports our proposal, as does Queen's. This project is being developed in conjunction with these other two facilities, and both are collaborating fully.

f. Availability of Resources

Both the financial and personnel resources needed to implement the proposal are available. As noted above, there is no capital expense, and the revenue generated will cover the operating expenses after the first year.

For the first three years of operation the NICU will need the following staff:

Staff	
Medical Director	0.1
Neonatalogist	0.5
Hospitalist/pediatrician	1.5
Neonatal Nurse Practictioner	0.75
Total	**2.85**

These staff are available. The neonatalogists and hospitalist/pediatrician will be provided under a contract with Kapiolani Medical Specialists. Neonatalogists Dr. Sneha Sood and Dr. Sherry Loo have already committed. Hospitalist/pediatrician Dr. Kent Kumashiro is also committed. Neonatal Nurse Pracitioners (NNP) may be provided under a contract with Kapiolani Medical Specialists, or may be hired directly by HMC. There are already 2 NNPs from Hilo who have graduated from the NNP program at the University of Hawaii and who are now in post-graduate training at Kapiolani. Other NNPs at Kapiolani and Kaiser have expressed an interest in per diem work at the HMC NICU.

The NICU unit will have 24/7 coverage by either a neonatalogist, hospitalist or NNP.

HMC NICU 10-24 final