



HAWAII STATE HEALTH PLANNING AND DEVELOPMENT AGENCY

ADMINISTRATIVE APPLICATION - CERTIFICATE OF NEED PROGRAM

Application Number: #15-11A Date of Receipt:
To be assigned by Agency

APPLICANT PROFILE

Project Title: Acquisition of Xi Surgical Robot

Project Address: 1301 Punchbowl Street

Honolulu, HI 96813

Applicant Facility/Organization: The Queen's Medical Center - Punchbowl

Name of CEO or equivalent: Arthur A. Ushijima

Title: President, The Queen's Medical Center - Punchbowl

Address: 1301 Punchbowl Street, Honolulu, HI 96813

Phone Number: 691-4688 Fax Number: 691-7990

Contact Person for this Application: Paula Yoshioka

Title: Executive Senior Vice President, Corporate Development, The Queen's Medical Center - Punchbowl

Address: 1301 Punchbowl Street, Honolulu, HI 96813

Phone Number: 691-7996 Fax Number: 691-7990

CERTIFICATION BY APPLICANT

I hereby attest that I reviewed the application and have knowledge of the content and the information contained herein. I declare that the project described and each statement amount and supporting documentation included is true and correct to the best of my knowledge and belief.

Handwritten signature of Arthur A. Ushijima over a horizontal line, with the word 'Signature' printed below.

Arthur A. Ushijima
Name (please type or print)

8-10-15
Date

President, The Queen's Medical Center-Punchbowl
Title (please type or print)

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

Public _____
Private X
Non-profit X
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: X
Honolulu: _____
Windward O`ahu: _____
West O`ahu: _____
Maui County: _____
Kaua`i County: _____
Hawai`i County: _____

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

- A. Site Control documentation (e.g. lease/purchase agreement, DROA agreement, letter of intent): **Not applicable – The project is located on the campus of The Queen’s Medical Center-Punchbowl.**
- 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.): **Certificate of Need.**
- C. Your governing body: **See Appendix 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: **See Appendix B.**
 - By-Laws: **See Appendix C.**
 - Partnership Agreements: **Not applicable.**
 - Tax Key Number (project’s location): **980080260025**

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			
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	Current Bed Total	Proposed Beds for your Project	Total Combined Beds if your Project is Approved
	N/A	N/A	N/A
TOTAL			

6. PROJECT COSTS AND SOURCES OF FUNDS

A. List All Project Costs:		AMOUNT:
1.	Land Acquisition	_____
2.	Construction Contract	_____
3.	Fixed Equipment	<u>\$1,815,000</u>
4.	Movable Equipment	_____
5.	Financing Costs	_____
6.	Fair Market Value of assets acquired by lease, rent, donation, etc.	_____
7.	Other: _____	_____
TOTAL PROJECT COST:		<u>\$1,815,000</u>

B. Source of Funds		
1.	Cash	<u>\$1,815,000</u>
2.	State Appropriations	_____
3.	Other Grants	_____
4.	Fund Drive	_____
5.	Debt	_____
6.	Other: _____	_____
TOTAL SOURCE OF FUNDS:		<u>\$1,815,000</u>

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.

This project proposes neither a change in service nor an additional location of an existing service. This project does exceed \$1,000,000 in capital expenditures.

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:
- a) Date of site control for the proposed project: N/A
 - b) Dates by which other government approvals/permits will be applied for and received: N/A
 - c) Dates by which financing is assured for the project: Currently assured
 - d) Date construction will commence: N/A
 - e) Length of construction period: N/A
 - f) Date of completion of the project: August 24, 2015
 - g) Date of commencement of operation: August 30, 2015

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.

This application seeks approval for the acquisition of a *da Vinci Xi* surgical robot that will allow the adaptation of minimally invasive surgery technology across more procedures and specialties. The *Xi* surgical robot will significantly enhance robotic surgery by allowing for more advanced and critical procedures to be performed. This is because the technology allows the surgeon to work in four quadrants versus just one. Having the use of four arms allows for higher acuity procedures, such as colorectal, oncological, thoracic, and deep organ procedures. Typically, these procedures are done as open procedures with long length of stays and potential delays in healing. This robot will allow patients to have these procedures done in a minimally invasive and safe manner. The introduction of this technology will decrease average length of stay, lessen pain for patients, and reduce a patient's recovery time so that they can return to their normal lifestyle more quickly.

a) Relationship to the State of Hawai'i Health Services and Facilities Plan.

This project will ensure that overall access to quality health care at a reasonable cost is maintained for residents and will allow residents to access new technology that will improve patient safety and care. Patients will not experience higher costs and, in fact, may realize cost efficiencies due to a decreased length of stay, less complications, and quicker healing. Moreover, converting major surgeries to the *Xi* will allow better patient flow due to decreased recovery times, helping to free up needed acute care beds for the whole community.

The acquisition of this robot will also help to bolster our state's workforce. This technology will allow experienced surgeons to sit, with better visualization, for the duration of the surgery rather than having to stand for hours. A strong robotics program hones the skills of local practitioners and serves as a draw for physicians and nurses from out of state.

b) Need and Accessibility

This technology would, for the first time, give patients the option of undergoing minimally invasive procedures when faced with what could be a catastrophic surgery. Minimally invasive procedures allow patients to heal more quickly, reduce the chance of complications and infections, and decrease patient length of stay. The Queen's Medical Center-Punchbowl mission is to fulfill the intent of Queen Emma and King Kamehameha IV to provide in perpetuity quality health care services to improve the well-being of Native Hawaiians and all of the people of Hawai'i. Queen's will continue to serve all the people of Hawaii with this new technology—in particular, the elderly, low-income persons, racial and ethnic minorities, women, persons with disabilities, and other underserved populations.

c) Quality of Service/Care

The *Xi* technology will overcome barriers that existing surgical robot systems experience. The *Xi* is different from existing surgical robots in use across the state because it has four arms and can perform on up to four quadrants at one time—all other surgical robots in the state have only one arm and can only operate on one area at a time. This means that surgeries that once had to be performed as an open procedure can now be done as a minimally invasive procedure. This improvement will apply across a number of surgical specialties, including urology, general, thoracic, bariatric, gynecology and oncology. Patients will not see higher costs due to the equipment and may, in fact, be able to realize efficiencies due to shorter lengths of stay, a faster recovery time, and less risk of complications.

The surgical robotics specialty team at Queen's is uniquely qualified to operate the *Xi* technology. With 36 physicians currently performing robotic procedures, the robotics specialty team at QMC-P have done over 5,000 robotic procedures. This ranks Queen's fourth in the nation for volume. Because of our high volume and level of expertise, QMC-P has become the training ground for robotic training in the Pacific. Our outcomes for surgical procedures using robotic technology show that QMC-P staff provide high quality care. We also have existing quality and safety policies that cover robotic surgery that will be applied to the new technology.

The robotics specialty team at QMC-P currently performing these procedures are ready to advance their skill set by using the Xi technology. Our robot specialty team will be trained on docking, instrument care, patient safety and operations. They will practice in a skills lab and be required to demonstrate competency prior to use. QMC-P has a large team of robotically trained professionals, which includes physicians, nurses and technicians. QMC-P, using its own resources, has expanded the strength and depth of the team in anticipation of this new service. QMC-P will provide any necessary training and education for staff. The facility is ready and willing to provide this. QMC-P has already begun residency training in robotic surgery, and the facility hosts other hospital physicians to seminars and pig lab training. In order to maintain quality assurance, QMC-P will extend its strict criteria for participation in the current robotic surgery program to include the Xi technology.

d) Cost and Finances (include revenue/cost projections for the first and third year of operation)

This project is expected to serve a projected 145 cases in its first year, growing at an incremental rate of two percent per year. The project is expected to gain net income starting in the second year due both to the revenue generated and, importantly, the cost reduction due to lower patient lengths of stay.

Year	Volume	Incremental Revenue	Incremental Cost	Cost Reduction**	Net Income***
One	145	1,997,383	2,965,597*	-326,035	-642,179
Two	168	85,602	98,912	-717,278	703,968
Three	171	85,602	107,845	-730,319	708,076

* - includes cost of Xi Robot (\$1.815m)

** - cost reduction is based on an expected lower length of stay

*** - Incremental Revenue + Incremental Cost – Cost Reduction

e) Relationship to the existing health care system

The acquisition of this new technology will strengthen our health care system and improve patient care and quality. The introduction of the Xi technology will also help to strengthen our healthcare workforce by allowing surgeons to complete more advanced robotic surgical procedures. It will also enhance patient throughput and a shortened time to return to life activities.

f) Availability of Resources

The Queen's Medical Center - Punchbowl, by a large multiplier, performs more minimally invasive surgeries using surgical robots than any other facility in the state. We currently have approximately 36 surgeons using the one-armed surgical robots who are ready to start practicing at a higher level and do more advanced procedures and who are being trained at cost to the hospital. This acquisition will not require the addition of staff—any expansions to the team will come from existing operating room members. Moreover, cost-saving strategies have already been implemented as part of this project. QMC-P has budgeted for and will be able to purchase the equipment using cash at hand.

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.

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