

Agency: Commerce, Community and Economic Development**Grants to Named Recipients (AS 37.05.316)****Grant Recipient: Maniilaq Association****Federal Tax ID: 920041461****Project Title:****Project Type: Equipment and Materials**

Maniilaq Association - Mammography and Ultrasound Equipment

State Funding Requested: \$100,000**House District: 40 / T**

One-Time Need

Brief Project Description:

Funding will be used to acquire a new 3D Mammography Unity and new Ultrasound Unit.

Funding Plan:

Total Project Cost:	\$662,073
Funding Already Secured:	(\$366,423)
FY2014 State Funding Request:	(\$100,000)
Project Deficit:	\$195,650

*Funding Details:**The Rasmuson Foundation has awarded \$250,000 toward this project, in memory of former Senator Al Adams.**We have requested \$195,650 from the Murdock Charitable Trust, but nothing has been awarded yet.**Maniilaq is contributing \$116,423 of its own toward this project.***Detailed Project Description and Justification:**

Maniilaq Association is requesting funding to acquire a new 3D Mammography Unit and new Ultrasound Unit. Planning to replace the mammogram unit began in June 2006 as part of the five year plan, located in the Capital and Deferred Equipment Needs list for the Biomedical Engineering Services at the Maniilaq Health Center (MHC). As of March 2012, it has been presented to the board of directors as part of the Financial Proposals for Medical Equipment for the Radiology department at MHC.

The Maniilaq service area population is about 80% Alaska Native, and Alaska Natives have a 30% higher risk of dying from all cancers than do white Americans. Moreover, cancer is number one killer in the Maniilaq service area with breast cancer being the number three killer. A mammography unit and the screening it provides is an extremely valuable tool in the early detection and treatment of breast cancer. Early detection of breast cancer greatly increases the patient's chances for survival. Our current mammography unit has exceeded end of life and needs to be replaced. When a piece of equipment reaches manufacturer's projected end of life, chances for the potential for error increases significantly and failure of some kind are increased, which would leave our region with no mammography services. Replacement of our current unit would allow us to provide this valuable service well into the future.

The Radiology Department at MHC uses ultrasound equipment for a variety of diagnostic studies. The new ultrasound unit

would significantly enhance imaging and diagnostic capabilities of performed abdominal, pelvic, obstetric, thyroid, renal, testicular and breast ultrasounds. We also perform a number of soft tissue region of interest studies for abscesses and masses wherever they happen to be located. The new mammography, thanks to better technology, will reduce patient exposure to radiation, provide greater detailed imaging, cut appointment time in half, and provide earlier detection of micro calcifications. The new ultrasound will provide better contrast and better visibility which will mean more accurate diagnosis and more clear and defined gray scale images. Moreover, software purchased with this unit will allow greater certainty to detect whether a lump is benign or malignant. Not only would mothers, grandmothers, daughters, aunts and nieces benefit, but the whole region would benefit from the improved health of people and lives saved.

Project Timeline:

The equipment will be purchased as soon as funding is available.

Entity Responsible for the Ongoing Operation and Maintenance of this Project:

Maniilaq Association

Grant Recipient Contact Information:

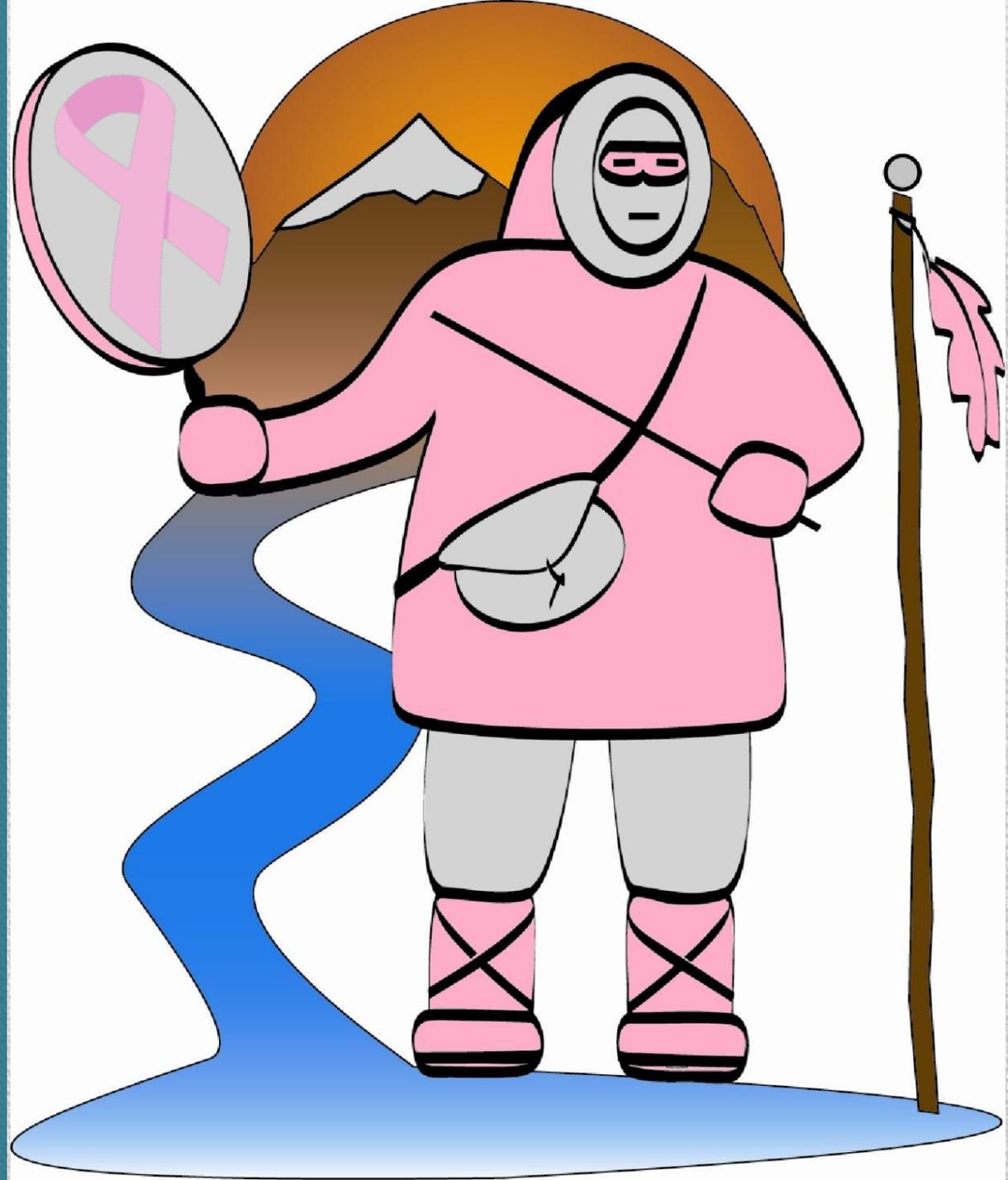
Name: Anthony Cravalho
 Title: Assistant Director of Planning and Development
 Address: PO Box 256
 Kotzebue, Alaska 99752
 Phone Number: (907)442-7636
 Email: anthony.cravalho@maniilaq.org

Has this project been through a public review process at the local level and is it a community priority? Yes No

MANILAQ ASSOCIATION

Radiology Equipment
Upgrade
Maniilaq Health Center
Kotzebue, Alaska
October 22, 2012

*Early Detection
Saves Lives*



Service Area



- ☞ Area Population – 8,200, 80% Alaska Native
- ☞ As a region most of our people deal with –
 - High poverty, 18%, 2X all Alaska rate
 - High unemployment, 11%, 2X all Alaska rate
 - High cost of living, 1.6X Anchorage COLA





Health Status



☞ Top Causes of Death in Maniilaq Region

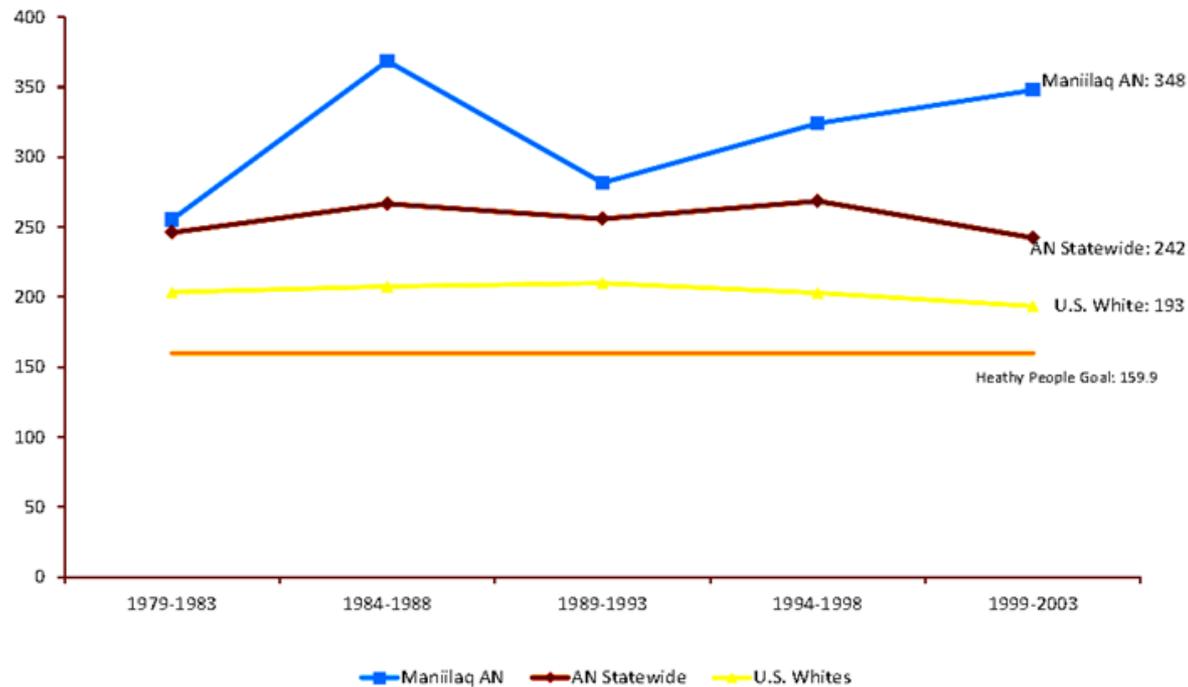
1. Cancer
2. Unintentional Injury
3. Suicide
4. Heart Disease

Statistics



Age-Adjusted Cancer Death Rates per 100,000, 5-year Intervals, 1979-2003

Alaska Data Source: Alaska Bureau of Vital Statistics
Surveillance, Epidemiology, and End Results (SEER) Program



Statistics



Leading Cancers, Maniilaq Alaska Natives, 1989-2003

Data Source: Alaska Native Tumor Registry

Site of Cancer by Rank	n	% of Total
1. Colon/Rectum	39	20.2%
2. Lung	34	17.6%
3. Breast	28	14.5%
4. Kidney	13	6.7%
5. Stomach	13	6.7%
6. Cervix	9	4.7%
7. Testis	7	3.6%
8. Prostate	6	3.1%
9. Liver	6	3.1%
10. Pancreas	5	2.6%
Total	160	82.9%



Teens

20s

30s

40s

50s

60s

70s

80s

A Woman's Risk of Getting Breast Cancer Increases with Age.

Risk is 1 in:

>28,000

19,608

622

93

33

17

11

9

Breast Cancer Awareness



Maniilaq Association



Radiology Equipment Upgrade Project
Maniilaq Health Center
Kotzebue, Alaska



Radiology Equipment Upgrade



☞ Completed

- ☞ Rad Floro/FFDR (Full-Field Digital Radiology)

- ☞ CT Service

☞ Pending

- ☞ Mammography Unit

- ☞ Ultrasound Unit

Mammography Needs



- ❧ Alaska Natives have a 30 percent higher risk of dying from all cancers than do white Americans
- ❧ Cancer is number one cause of death in the Maniilaq Service Area with Breast Cancer being the third leading type of cancer
- ❧ Access to screening services is a significant need for the population. The board has put a high priority on patient travel for mammography screening.
- ❧ The age-adjusted cancer mortality rate for Alaska Natives is 80% higher than for non-natives in the US.

Early Detection



Saves Lives

Radiology Equipment Status



- ❧ The mammography and ultrasound units have both reached their end of life stage, which can ultimately lead to higher cost of replacement parts, falling out of maintenance agreements and may not meet future certification requirements (currently in compliance ACR, FDA)
- ❧ The mammography unit was last replaced in 2000 and is an invaluable tool for the screening of breast cancer.
- ❧ The ultrasound unit was last replaced in 2002 and is a invaluable tool in for cancer diagnosis as well as a diagnostic tool for neonatal and internal organs, etc.

Mammography Advances



- ❧ CR (cassette digital) to FFDM (full-field digital mammography)
- ❧ Reduction in patient exposure to radiation
- ❧ Greater detailed imaging
- ❧ Cuts appointment time in half
- ❧ Earlier detection of micro calcifications

Hologic Selenia Dimensions



- ❧ Image acquisition and simultaneous displays into one work station
- ❧ Ergonomic Framework & Support
- ❧ Excellent image quality and more efficient workflow

Ultra Sound Needs



- Combined with the use of the new mammography unit, Ultrasound is used to determine if a breast lump meets the criteria of malignant or benign.
- It will not replace the need of biopsy, but it will allow patients to find out if they have to travel to Anchorage for more extensive health care.
- The Radiology Department at MHC uses ultrasound equipment for a variety of diagnostic studies. The main studies performed are abdominal, pelvic, obstetric, thyroid, renal, testicular and breast ultrasounds. We also perform a number of soft tissue region of interest studies for abscesses and masses wherever they happen to be located.

Ultrasound Advances



- ❧ Better contrast
 - ❧ Better visibility
 - ❧ More accurate diagnosis
- ❧ More clear and defined gray scale images
- ❧ Ability to focus on abnormal area to determine what density the soft tissue is
- ❧ Software purchased with this unit will allow greater certainty to detect whether a lump is benign or malignant

Philips Ultrasound iU22 System



Thank You



☞ Encourage Someone You Love To Have Her Annual Mammogram.

