Making Healthcare Accessible on the World’s Largest Island

Covering a geographic area slightly more than three times the size of the state of Texas and with a population of only 56,739 (with approximately 14,000 people living in the capital of Nuuk), Greenland reaps tremendous benefits from their telemedicine program.

The island of Greenland is divided into sixteen health care districts. These small health centers are staffed by one to four physicians and support staff and serve communities of 550 to 5,500 residents. These individual health districts are responsible for providing the primary care to the town, villages and small settlements within their region.

While each of these sixteen health centers can handle minor surgeries, common treatment in internal medicine and can provide community mental health services, they are unable to provide services for more complicated cases. In the past, people with more complicated illness had to be referred to Queen Ingrid’s Hospital in Greenland’s capital of Nuuk or to a specialist in Denmark.

On average 22% of Greenland’s residents live in villages located up to hundreds of kilometers from any health centre. Transport and travel to medical facilities is costly and there are limited connections to many towns and villages. For much of the year, the weather in Greenland can also make travel very difficult, arduous or even impossible.

A major problem Greenland’s Health Ministry faced was how they could increase the access to care, improve quality while reducing the number of patient that were medevaced or transported to Denmark while still providing timely and expert medical care to the entire population of their island. Greenland looked to Alaska’s telemedicine program as a template for answers to their healthcare challenges.

The AFHCAN system in Alaska worked cooperatively with the Greenland Health Ministry including the Home Rule Government of Greenland, agreeing to broaden the relationship between the United States and Greenland. A delegation from the Greenland Ministry of Health visited Alaska in 2006 for a series of meetings with AFHCAN in Anchorage and Maniilaq Association in Kotzebue to facilitate the exchange of information on how telehealth is used to enhance health care in Alaska.

* Source: World Bank, World Development Indicators
Beginning in 2008, Greenland began the process of implementing a Telemedicine Encounter Management System (TEMS™) of its own. The key component of the TEMS™ system in Greenland is the AFHCAN tConsult software. The TEMS™ system also consists of AMD’s Integrated Telemedicine Cart featuring:

- AMD-400s Camera and Illumination System with Medical Scopes
- AMD-2500 General Exam Camera
- AMD-8221 Spot Monitor
- AMD-3875 12 Lead Interpretive ECG

In Greenland, the AMD cart has been nicknamed “Pipaluk carte” (Pipaluk means the caring.) This system has greatly reduced the number of unnecessary medical transports and has given the people of Greenland unprecedented access to quality healthcare. “The AFHCAN client is one of the first Greenlandic software applications,” commented Morten Algy Bonderup, IT Consultant for Greenland Healthcare.

Since 2008, all cities and settlements in Greenland are in the process of being outfitted with “Pipaluk” telemedicine equipment (AMD’s Integrated Telemedicine Cart). Health personnel in Greenland are able to use the equipment to take pictures of patient’s ears and skin, measure their blood pressure and hear their heartbeat. Images, data and other recordings can be routed to specialists and professional people in the whole country which make diagnosis and prescribe the best treatment.

The final phase of the Greenland telemedicine project began in March 2010 when John Nielson and Morton Algy Bonderup visited AMD’s headquarters in Chelmsford, MA to discuss final product selections and determine the best equipment and versions of software to be used for the final twenty-one installations.

By August 2010, all of Greenland’s village with more than 50 residents will be fully outfitted with telemedicine equipment.

“One of the program’s greatest challenges as we continuing into the future is educating and training the doctors and nurses. Many of Greenland’s doctors and nurses come from Denmark and only stay in Greenland for short periods of time, making it difficult to train on new equipment and software,” said John Nielson, Greenland Healthcare’s IT Operator.

“As the program moves into the future, my hope is that it continues to save the country of Greenland money,” stated Algy Bonderup. “I also hope that telemedicine can continue to provide a higher quality of care and better treatment for the people of Greenland close to where they live.”
“AMD is honored to have been chosen to be a part of the extraordinary telemedicine program in Greenland,” noted Dan McCafferty, AMD’s vice president of global sales and corporate development. As Greenland’s program enters its final phase of implementation, my wish is that AMD’s solutions continue to provide the country with accessible and cost effective solutions well into the future.”

AMD is looking to spotlight a new customer in our newsletter and on our website every quarter.

If your program is interested in being featured in this spotlight, please contact Kristen Deveau at kdeveau@amdtelemedicine.com or at 978-937-9021.