

TANDBERG CUSTOMER PROFILE

Kapiòlani Medical Center for Women and Children: *Extending Care*



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JANA HALL, PH.D., M.B.A.
MANAGER, KAPIÒLANI MEDICAL CENTER
FETAL TELE-ULTRASOUND GRANT

PROGRAM GOALS

Imagine having to manage the challenge of a high-risk pregnancy, with its extreme physical and emotional demands. Now, imagine that you are miles away from a doctor specially trained to help you, and you have to wait six days until that doctor's next visit to your island. You could fly to Honolulu, but cost is high, emotional and physical demands are great and travel can be inconvenient. This has been the situation for many Hawaiian women for a long time. This is all about to change, thanks to the introduction of tele-ultrasound...

Based in Honolulu, Hawaii, Kapiòlani's Fetal Diagnostic Center is the only tertiary-level hospital for women and children in the Pacific Basin. Fetal Diagnostic Center specializes in care of high-risk pregnancies. Unfortunately, the large coverage area, the distance between the islands and the limited number of specialist medical personnel have made it difficult to provide immediate access to the extremely specialized care these patients need. To meet these needs, the medical staff has had to travel extensively between islands and locations to examine and meet with patients and colleagues. This travel is expensive, time consuming and not optimal when dealing with high-risk cases.

To overcome these limitations, the Kapiòlani Medical Center endeavored to deploy the first tele-ultrasound network in Hawaii. After reviewing the available products and solutions, the Medical Center determined that the TANDBERG HCS III product line could best meet their requirements. Ultimately, the Hawaii network will consist of 10 sites on 4 islands. The hub site is located within the Fetal Diagnostic Center in urban Honolulu. Seven of these systems are already in place and training is underway.

This exciting solution involves retrofitting existing ultrasound machines to enable perinatologists (obstetricians who specialize in high-risk pregnancies) to “see” a fetus remotely using video monitors located within Kapiòlani's Fetal Diagnostic Center. Perinatologists can then provide advice and care to patients, their regular obstetricians, radiologists and sonographers 24 hours a day, 7 days per week. They can now provide ready access to the specialized services a maternity patient needs.

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TANDBERG WORLD HEADQUARTERS
Philip Pedersens vei 22
1366 Lysaker, Norway
Tel: +47 67 125 125
Fax: +47 67 125 234
Video: +47 67 117 777
E-mail: tandberg@tandberg.net

200 Park Avenue, Suite 2005
New York, NY U.S.A. 10166
Tel: +1 212 692 6500
Tel: +1 800 538 2884 (toll free in the U.S.)
Fax: +1 212 692 6501
Video: +1 212 692 6535
E-mail: tandberg@tandbergusa.com

www.tandberg.net

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THE APPLICATION

More than 6,000 health problems can be detected prenatally; ultrasound is a primary detection tool. In a high-risk pregnancy, monitoring a fetus by ultrasound can be particularly important. The goal of the Fetal Tele-Ultrasound Project is to extend patients' access to this critical prenatal care.

Jana Hall, Ph.D, M.B.A., is the manager of the Kapiolani Medical Center Fetal Tele-Ultrasound Grant. According to Hall, "First and foremost, the introduction of tele-ultrasound will help women with high-risk pregnancies by increasing day-to-day access to high-quality care from our physicians." She said in addition to alleviating uncertainties in having to wait until the next time the Oahu-based perinatologist can fly to the neighbor island, this increased access will also reduce or in some cases eliminate the need for travel to Honolulu, easing cost and travel anxieties. Hall adds, "It will also benefit partners, who may not have been able to travel to Honolulu in the past, but will now be able to take part in tele-ultrasound appointments."

According to Hall, "We are excited by what this means, both for our patients and for our professional staff. Fetal Diagnostic Center perinatologists will still make visits to the distant locations, but now we will have the added benefit of also being able to provide readily available monitoring for patients where needed."

Dr. Greigh Hirata is the Medical Director of Fetal Diagnostic Center and a faculty member of John A. Burns School of Medicine of University of Hawaii. He states, "The fetal tele-ultrasound service solves the problem of needing to be at two or more places at the same time for patients, our remote/rural physician colleagues and sonographers. It's like being able to extend our hands, eyes and ears right across the ocean to neighboring islands in order to care for a pregnant patient just as though she were right here in our office."

SUMMARY

Like many parts of the world today, Hawaii has a rich mix of ethnicities, and practically every ethnic group has complications in pregnancies that need to be monitored. For example, there is variation in incidence of thalassemia (an inherited blood disorder), diabetes and pre-term labor. Now, thanks to tele-ultrasound, these patients can more readily receive the specialized care they need. TANDBERG Vice President of Applications Richard Grace comments, "It is so exciting to see the good that can be accomplished as a result of this technology. TANDBERG is honored to be a part of the team that will be easing the stress of women involved in a high-risk pregnancy."