

“High Tech Comes to Home Health Care”

September 2022

Dear Friends,

Returning from a visit to a home health care office supported by Yodogawa Christian Hospital, David was pumped up about how “high tech” is impacting home health care!

In our world with increasing inequities to obtain quality health care, we all hope for access to good doctors and good treatment at a facility with up-to-date equipment. This hope remains elusive for so many, even in Japan, with its highly developed economy and national health care program. There’s good news!

Ever since the hospital was constructed with “seed money” from Presbyterian Women in a very poor area where few services were provided, it has flourished and grown remarkably. About 10 years ago the hospital needed to build a new facility. As it sought out land for that purpose, over 50,000 signatures were collected from people in the local area asking the hospital to rebuild but NOT relocate. The profound impacts of its “Whole Person Healing” practices were evident in the community. You could say the hospital developed “good cred” in the neighborhood! They stayed.

Providing quality health care locally involves taking care into homes in the community, not just at the 580-bed hospital. One of the latest efforts involves getting out into the neighborhoods with “high tech” home health care nursing services.

Yodomachi, a home health care agency, serves in an area that was the original site of a hospital clinic. Residents have great trust in the hospital and so they trust this clinic and have high expectations. That’s a big challenge!

While some home health agencies hire nurses through recruitment agencies that charge a fee, Yodomachi's policy is that if they are going to spend money, they will invest in the latest technology to use in the field for patients to receive high quality nursing care.



President Yamane with new technology

The nurses' tenure here is longer and more stable than at other facilities, with some nurses having more than 20 years of experience. Some veteran nurses with experience in hospitals have moved into home health care.

Often these nurses care for patients to the end of life. One nurse said, *"It's not just a job, it's giving and receiving...although it seems insensitive to say, it is true that while helping ill people, I'm having fun."*

How is this hope being realized for the elderly here?

First, nurses need to get there. So, the nurses go into the neighborhoods to homes traveling on electric bicycles. Normally this type of bicycle would last 10 years; however, because of high usage, their bikes last about 3 years. It is not uncommon for each nurse to travel 10 miles a day on a bicycle. The company contracts with a freelance mechanic for weekly inspections and repairs on these bicycles. As you might expect, nurses are on call in all types of weather: heat, rain, and snow! About 35 nurses handle approximately 150 visits every day.

In one of the neighborhoods, the nursing station serves as a base for about 40 nurses moving out on bicycles with baskets on both the front and back.



Battery Powered!

What's in the baskets? They carry supplies along with personal care, compassion, and love, and nowadays in their baskets, there are some new "technological tools."

Yodomachi has become a clinical field site where research is being conducted. The home health care clinic functions as a satellite testing and training facility in partnership with the University of Tokyo for research in the fields of nursing science and engineering. Nurses use new devices and technologies to provide in-home care for patients. In turn, the nurses offer feedback on how the devices function and any problems they encounter along the way.

Remote nursing, using Microsoft's AR (Augmented Reality) equipped devices, was deployed clinically for the first time in the world by nurses in Yodomachi!

This project supports nurses in new ways. By using the latest technology nurses have access to doctors and nursing specialists who can advise and assist them remotely. The latest technology enables nurses to provide high-quality care faster than before, and less experienced nurses are able to handle complex cases.

Here's an example. Using a digitally augmented device, the hands of a university professor in Tokyo are synthesized as a virtual image on an iPad onto the hands of a home care nurse at a patient's home. The professor instructs and guides the hands of a nurse in a specific procedure via virtual images. Through this remote control, the nurse receives visualized instructions for patient care from a distance. Digitally the hands of the professor can guide the nurse's hands on the patient in real time! You gotta love this!



David just had to “try out”
a new diagnostic VR (Virtual Reality) headset!

Here's another example. Medical device manufacturers have developed portable hand-held echo devices which can be connected to smartphones, which enhance treatment, improve quality of living, and reduce burdens on family caregivers.

Portable hand-held echo devices dramatically improve care; however, they're expensive and require advanced technology for imaging and reading, which is one reason they are not widely used even in the urban areas of Japan.

Therefore, the project is also working to enhance a portable echo technology training program for both nurses and staff. Previously echo device education and training programs for nurses were offered only at the university. Now they will be held on-site starting this year with classes and training provided for using new portable hand-held equipment.

One outcome is that Yodomachi currently has a large amount of clinical data in Japan in this area and has received requests from manufacturers for cooperation in new product development. New applications have been developed based on the imaging and assessment data from these nurses.

This introduction of new technology has reduced the number of emergency calls at night by improving the quality of care during the day. In the vicinity around where the office is located the local government has asked them to expand their role beginning this year.



Director: Mr. Miyaji; President; Mr. Yamane (holding a 360-degree camera)
Hospital Staff: Ms. Sakiyama

Cutting-edge technology equips nurses to provide faster and more advanced personal care in homes. Even a simple small lapel camera gives a 360-degree view of the patient and nurse and links them to the University of Tokyo where specialists assist nurses with diagnoses and treatment.

So, David had to ask, Mr. Yamane: “What happens when these new high-tech toys break?” Mr. Yamane: “We just ship them back!”

We’re blessed to partner in “cutting edge” care and research whereby people with means help others receive high-quality personal care. Home health care is a global need because aging populations all around the world seek good care with compassion and love.

“...When was it that we saw you sick... and visited you?....

“Truly I tell you, just as you did it to one of the least of these who are members of my family, you did it to me.” [Matt 25:39-40]

Thank you for your ongoing prayers and financial support. Grateful to be witnesses of God working among our partners in Japan!

In Christ’s abiding love,

David and Sue Hudson

<https://www.presbyterianmission.org/ministries/missionconnections/david-and-susan-hudson/>

Please read the following letter from Rev. Mienda Uriarte, acting director of World Mission:

Dear Partners in God's Mission,

What an amazing journey we're on together! Our call to be a Matthew 25 denomination has challenged us in so many ways to lean into new ways of reaching out. As we take on the responsibilities of dismantling systemic racism, eradicating the root causes of poverty and engaging in congregational vitality, we find that the Spirit of God is indeed moving throughout World Mission. Of course, the past two years have also been hard for so many as we've ventured through another year of the pandemic, been confronted with racism, wars and the heart wrenching toll of natural disasters. And yet, rather than succumb to the darkness, we are called to shine the light of Christ by doing justice, loving kindness and walking humbly with God.

We are so grateful that you are on this journey as well. Your commitment enables mission co-workers around the world to accompany partners and share in so many expressions of the transformative work being done in Christ's name. Thank you for your partnership, prayers and contributions to their ministries.

We hope you will continue to support World Mission in all the ways you are able:

Give – Consider making a year-end financial contribution for the sending and support of our mission personnel (E132192). This unified fund supports the work of all our mission co-workers as they accompany global partners in their life-giving work. Gifts can also be made "in honor of" a specific mission co-worker – just include their name on the memo line.

Pray – Include PC(USA) mission personnel and global partners in your daily prayers. If you would like to order prayer cards as a visual reminder of those for whom you are praying, please contact Cindy Rubin (cynthia.rubin@pcusa.org; 800-728-7228, ext. 5065).

Act – Invite a mission co-worker to visit your congregation either virtually or in person. Contact mission.live@pcusa.org to make a request or email the mission co-worker directly. Email addresses are listed on Mission Connections profile pages. Visit pcusa.org/missionconnections to search by last name.

Thank you for your consideration! We appreciate your faithfulness to God's mission through the Presbyterian Church (U.S.A.).

Prayerfully,



Rev. Mienda Uriarte, Acting Director
World Mission
Presbyterian Mission Agency
Presbyterian Church (U.S.A.)

To give, please visit <https://bit.ly/22MC-YE>.

For it is the God who said, 'Let light shine out of darkness,' who has shone in our hearts to give the light of the knowledge of the glory of God in the face of Jesus Christ.

2 Corinthians 4:6