

# Incorporating 21st century technology into patient care:

## Surprising benefits, unexpected challenges

### Change AGENTS Initiative

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The John A. Hartford Foundation's Change AGENTS Initiative was a three-year effort dedicated to improving the health of older Americans, their families, and their communities through practice change. The initiative harnessed the collective strengths, resources, and expertise of the foundation's interprofessional community of scholars, clinicians, and health system leaders. The Change AGENTS Initiative was managed by The Gerontological Society of America.

The 34 projects funded through the Action Awards grants program showcased the improvements that interprofessional teams can bring to light by implementing evidence-based programs into targeted care settings in local environments.

These one-year grants for up to \$10,000 were available to interprofessional teams led by Change AGENTS for the purpose of achieving meaningful change to practice or policy that will improve the health and wellbeing of older adults and/or their families.



From texting to Skyping to using social media, technology has transformed personal communication in revolutionary ways. Why should those advances not be deployed in the health care setting for the betterment of patients and improved satisfaction with care?

That was a primary question Winnie Suen, MD, MSc, of Inova Fairfax Hospital in Falls Church, Virginia, kept asking herself in 2014 as she cared for patients who were moving from the acute care setting to a skilled-nursing and rehabilitation facility about 8 miles away. As she sought to implement texting and videoconferencing in patient-care settings, the technologies sometimes caught on like Pokémon GO. Other times, the ah-ha moment was more like, “I see now why this can’t move forward.”

With a Change AGENTS Action Awards grant, Suen tested the limits of 21st century advances in interprofessional communication and patient care with colleagues Steven Dean, MS, and Amanda Gannon. Dean, administrative director of telemedicine operations at Inova Fairfax, was an important partner in the effort, and Gannon, a health care administrator, helped extend the possibilities into the Burke Health and Rehabilitation Center, a 120-bed postacute transitional care facility that essentially serves as a step-down unit for a wide variety of Inova inpatients.

Administered by The Gerontological Society of America, the Hartford Change AGENTS Initiative accelerated sustained practice change to improve the health of older Americans, their families, and communities. The initiative harnessed the collective strengths, resources, and expertise of the John A. Hartford Foundation's interprofessional community of scholars, clinicians, and health system leaders so they could learn from and support one another while they adopted, evaluated, and sustained changes in practice and service delivery. The Change AGENTS Action Awards grants program was designed to support

Change AGents in implementing promising ideas in practice change.

## The situation

As with hospitals across the United States, keeping patient length of stay to a minimum is important to the health-system bottom line, and emphasis on ensuring a quality transition of care was growing in 2014. Suen's geriatrics-trained skilled-nursing facility (SNF) team essentially served as a bridge between the inpatient staff at Inova and the rehab professionals at Burke. "We know the staff who's taking care of these patients at Burke, but we also know the Inova inside-the-hospital team," Suen noted. "Our task was to bring these people together by improving communications among hospitalists, case managers, and the facility nursing team," all with the goal of improving SNF patient satisfaction and enhancing the transition of care, thereby reducing readmissions to the hospital.

Many different types of patients receive rehabilitation care at Burke, Gannon added. "We're anything but the stereotypical nursing home," she said. "From patients awaiting heart transplants to those with cancer, joint replacements, strokes, or injuries from sports or automobile accidents, many of our patients are discharged home with a higher quality of life than when they arrived."

A challenge for Suen and her team was assessing the reports and requests they received from Burke nurses. "There's a big difference between being able to walk into a hospital room and seeing the patient firsthand and trying to develop a clinical plan based on reports from the nursing home that someone 'just doesn't look right' or 'is anxious.' In those situations, I'd really prefer to talk to the patient and find out what's really going on."

## The solution

Suen sought to address these challenges through implementation of secure texting and videoconferencing systems among those caring for patients in the two settings. The texting system worked remarkably well, especially on the inpatient side and also in the long-term care facility. Videoconferencing to permit physician visualization of and conversation with patients was less successful.

Using funds from the Change AGents Action Awards grant, Inova obtained trial licenses to TigerText, [<https://www.tigertext.com>] a secure, app-based clinical communications platform that can be used from a mobile device. "We started by putting our bridge team and the inpatient and Burke teams on the system," Suen recalled. "We then added the hospitalists, who in turn said they needed the case managers on the system, and soon they wanted the hospital discharge staff to have access to the texting system."

At Inova, the demand for TigerText took on the feel of a grassroots movement, Suen said. "While it was great that we could try out the system using seed money from the grant, we knew that Inova was not going to just spend a lot of money adding more and more staff to the system and keeping it going long term." But through "grassroots interest and support, the more people tried it, the more people liked it, kind of like a Pokémon GO, right?" she said. "Where they're like, oh, what do you have? And the next person said I want to try that, and they get on it, and it just kind of spiraled."

Spurred on by a reduced length of stay and higher patient satisfaction scores in the areas with the system, as well as the availability of the secure texting system in two nonclinical situations—an active shooter on the Inova campus that made staff unsure about whether to report for their shifts and a major, traffic-paralyzing snowstorm in the nation’s capital—Inova decided to implement TigerText systemwide. “It was great that we started off with this small pilot and saw this become such a success,” Suen said. “It was very rewarding to see what can be done with the right people, the right arguments as to how this can really help patients, communication, and effectiveness.”

The Burke facility staff were not able to implement the texting system as readily as the Inova personnel, and the videoconferencing system was also problematic in that setting. Facility staff generally did not carry their personal mobile devices while caring for patients, limiting the effectiveness of texting. Gannon said the staff liked the TigerText system very much, and they used it effectively through computer terminals. Although the program was not the roaring success it had become at Inova, everyone felt that the texting project was nonetheless also effective at Burke.

The telemedicine system was very user friendly—facility staff could reach out to Suen and her bridge team by just touching the screen—but they would have to retrieve the device and bring it to each patient’s room, Suen said, and the device might be at a different nursing station or on another floor. The system just did not fit in well with patterns of care in the SNF.

Dean, working with a wealth of experience from within the Inova telemedicine unit, assessed this part of the project in terms of acceptance of technology, change management, and finding win-win solutions to challenges. “If we had it to do all over again,” he said, “I’d involve as much of the facility staff as possible in the up-front planning—maybe even everyone. SNF staff in general are ripe for this type for virtual care. Just as much as anyone, they want better handoffs of patients, and they want to avoid the 2 a.m. wake-up calls and Friday night admissions where immediate access to hospital staff is difficult.”

### **How the grant improved outcomes**

The Hartford Change AGENTS Action Awards grant provided “a great learning experience for me,” Suen said. “We had a good idea, one that was more successful than we could have imagined on the acute-care side. We have to back it up on the nursing home side. It’s a whole other world there, and it’s difficult to meld the two without really good coordination from the beginning.”