

Stroke Program Forges New Ground after Loss of Two Leaders

By Tyler Smith

Late last summer, the Stroke Program at University of Colorado Hospital confronted a brain drain.

Two key leaders, Clinical Director Alexandra Graves and Neurosurgery Program coordinator Christy Casper, both advanced nurse practitioners specializing in neurology, left for another metro-area hospital in August. Their departures created a vacuum in a program that in the past five years achieved a series of successes, culminating this year with the hospital earning Joint Commission certification as a [Comprehensive Stroke Center](#).



Stroke Program Medical Director William Jones, MD, says the loss of Graves and Casper was difficult, but remaining leaders and staff are charting a new course.

"It's a kick in the pants," Stroke Program Medical Director William Jones, MD, said in late August after Graves and Casper left. "We've done lots of soul-searching about where we want to go and what we need to do to get there."

The loss of two highly talented clinicians was both professionally and personally wrenching, he said. He and Graves worked closely to build the Stroke Program after it earned its initial [Primary Stroke Center certification](#) from the Joint Commission in March 2008.

"Alex and I saw all the stroke patients for a time," he said. "We were like Siamese twins."

But today Jones said the program is ready to move on, not only to new leaders, but also to a new era.

"We've built a second tower, moved from being a Primary Stroke Center to a Comprehensive Stroke Center and developed from a stand-alone hospital to a system. All of those things have shaped our thoughts about where we have been and where we are going."

New course. The picture has sharpened considerably in the past month. The program hasn't replaced Graves or Casper yet, but the team and hospital leadership have clarified the program's goals. The strategy includes changes ranging from upgrading stroke education to reworking patient rounding to building a system for remote consultations.

Also vital to the change is bolstering relationships between the stroke programs at UCH and its University of Colorado Health partners, Poudre Valley Hospital, Medical Center of the Rockies and Memorial Hospital.

Much of the plan is still on the drawing board, but the program has set a firm direction, Jones said. As he put it, "We're still in an early phase, but the gears are moving."

Following the resignations of Graves and Casper, a series of

Continued

strategic meetings took place, attended by Stroke Program leaders and top hospital administrators, including President and CEO John Harney, Chief Nursing Officer Carolyn Sanders and Vice President of Ambulatory Services Suzanne Sullivan.

Plans to grow. “Our goal was not to simply replace Alex and Christy, but to evaluate what we need to do to develop the program further,” said Kimberly Meyers, executive director of Neurosciences, Spine and Rehabilitation at UCH. “The loss pushed our agenda faster.”

In addition to filling Graves’ and Casper’s positions, the program is looking to add a stroke nurse to assist with provider and patient education. The data analyst position at UCH will be raised to the system level, with a staffer added to assist with data extraction.

“We want to be sure that we are measuring the same things across the entire system,” Meyers said. “The goal is to enhance and automate our data collection and make it more timely.”

The plans also include creating a position for a telehealth coordinator, the Stroke Program’s first foray into remote electronic consultations with community providers, Meyers said. For example, an emergency medicine physician at a community hospital examining a patient with stroke symptoms might hook up with a UCHealth provider for a virtual neurologic exam on a hand-held tablet or laptop computer.

Radiology images and lab values could be fed to the consulting provider to assist in making a clinical decision – ruling out stroke, administering clot-busting tPA or determining the need for an intra-arterial procedure to stop a hemorrhage, for example.

“If a provider isn’t comfortable administering tPA, they could send them to us,” Meyers said, “or we could help them keep the patient. If the need is for an intra-arterial procedure, we can have a team ready to deliver the treatment. Telehealth is an opportunity to set up new relationships and develop new partners. It’s a way that we can serve the community better.”

System strengths. Jones emphasized that the goal of telehealth is to take advantage of UCHealth’s reach across the Front Range, not to make UCH the sun around which all satellites must orbit.

“It’s not a hub-and-spoke model, but rather multiple hubs and spokes,” he said. A patient in Cheyenne, Wyo., for example,

who needs additional care not available at his or her community hospital, would in most cases be served by Poudre Valley Hospital or Medical Center of the Rockies, he noted.

**UCH is now a NATIONALLY-CERTIFIED
COMPREHENSIVE STROKE CENTER**



To maintain Comprehensive Stroke Center accreditation, UCH’s program must develop ways to improve clinical care and services.

“Even if a patient can’t stay local, it doesn’t mean he or she has to come to Aurora,” Jones said. “If a patient needs intra-arterial or ICU care, we can offer it at UCH. But we need to show that we can provide high-quality care, both as individual hospitals and as a system. Our mantra must be that we deliver the best care possible as close to home as possible.”

Extending education. Meanwhile, the Stroke Program last month launched classes to ensure that more staff have knowledge of the [National Institutes of Health Stroke Scale \(NIHSS\)](#), which is used to identify and assess the severity of a stroke. The three-hour class covers how to assess patients with ischemic stroke – caused by clots that impede blood flow to the brain – with video, live teaching and a competency test, and is required of all nurses in the ED, the Neurosciences Unit and the Neuro ICU, said Kimberly Rapp, RN, Neurosciences stroke program nurse.

The NIH Stroke Scale replaces an extended neurologic exam currently used by nurses to assess ischemic stroke, Rapp said. It also meets a requirement for improvement issued by Joint Commission surveyors after the Comprehensive Stroke Center site visit in March

“We needed a standardized assessment that can be used through the patient’s entire hospital stay,” Rapp said. “The Joint Commission finding made us look at what is best practice and what nurses should do to assess patients with stroke. There is no perfect assessment because of the large variety of possible stroke symptoms. But the NIH scale is considered the international gold standard for ischemic stroke.”

The program also aims to add another Stroke Program nurse to supplement the patient education work Rapp has focused on, which includes follow-up with stroke patients post-discharge.

Continued

The new role might encompass patient education; outreach to health fairs, emergency medical services and other community venues; and quality and process-improvement projects, Rapp said.

New grounds for rounds. Rapp is also involved with a discharge-rounding pilot launched in September by the Neurosciences Unit. Casper originally ran the twice-weekly rounds; with her departure, the Neurosciences Unit's charge nurses are taking the lead.

One aim of the rounds is to improve the transition of care of stroke patients on the inpatient floors, said Jennifer Simpson, MD, a neurohospitalist who works closely with the Stroke Program and is participating in the NIHSS training. The Joint Commission requires that stroke patients receive high-quality care throughout the hospital. But the rounds also focus on getting patients ready to transition from the hospital to the next level of care. A future goal is to help the transition of Neuro ICU patients to the floor and to other levels of care, Simpson added.

Brain-injured stroke patients face mental and social challenges after discharge, which increases the importance of involving physical and occupational therapists, social workers and case managers in rounds and discharge planning, Simpson said.

The initiative also includes streamlining the rounding process, Simpson said. Based on feedback from nurses, the team redesigned the notes template and created a script to follow with visual guides.

Next steps. The discharge rounding approach, with its emphasis on integrated team care, mirrors the broad direction of the Stroke Program as it prepares for its next growth phase. The new clinical director will be an advanced nurse practitioner, as Graves was, Meyers said, but less "the doer of all things" than the leader of a team at UCH and a collaborator with UCHealth hospitals north and south.

"We're looking for someone to mentor and guide, to look for best practices and to help us learn from each other," Meyers said.

The pressure is great to get it right – and quickly, Jones said. The additional bed space at UCH has opened new opportunities for the Stroke Program, but its resources must keep pace or an opportunity to serve more patients will be lost.

"We need to get a team in place," he said. "Stroke is still undertreated.

There are many patients who aren't getting to the hospital on time and not getting the treatments they need. We have lots of room to improve."