

SNGH Stroke Program Newsletter

REVISED ED STROKE ALERT PROCESS

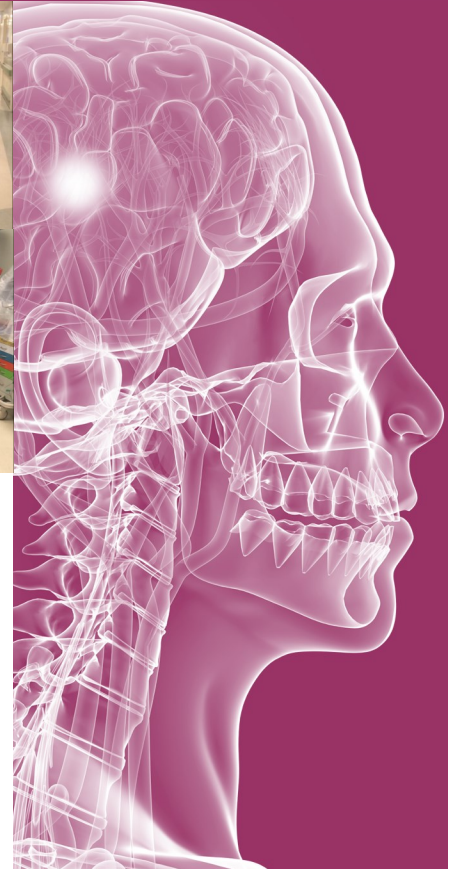
The SNGH Emergency Department Stroke Alert process is about to see some great changes! In response to the decrease in the target time to tPA (Alteplase) intervention for eligible patients from 60 to 45 minutes, as well as specific challenges noted in tPA administration cases here at SNGH, the Stroke Program is revising the ED Stroke Alert process by (1) defining roles during the stroke alert and (2) adding two new designated roles: a facilitator and a tPA administrator. These roles will help improve communication to all stroke alert team members, provide designated resources during the stroke alert, and promote a high sense of urgency for the entire stroke alert.

Training for all ED and Neuro ICU staff on the new stroke alert process is available in OneLink (search "SNGH Revised ED Stroke Alert Process") as well as three designated Mock Stroke Alert Drills over the month of October. Please note the days and times below (bottom right) for the Mock Stroke Alert Drills and plan on attending at least one. OneLink training should be completed no later than October 31, 2016.

With the addition of these two roles, we can routinely administer tPA within the new 45 minute window and meet other target times. The new ED Stroke Alert process



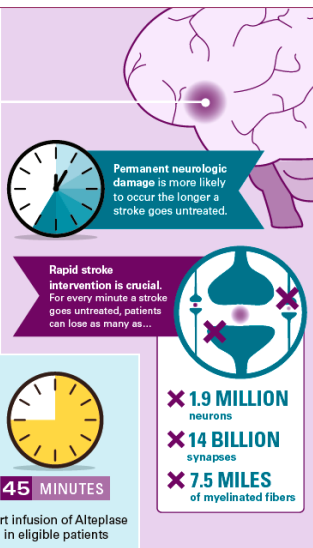
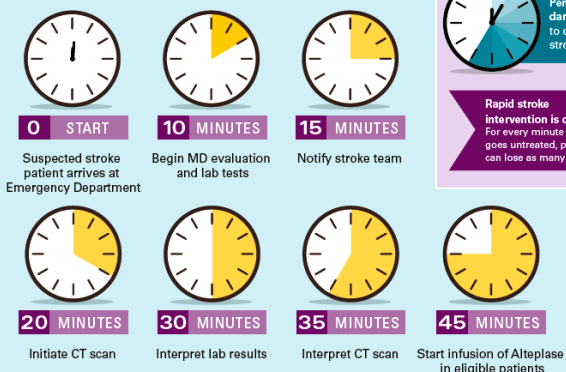
Pictures of the ED Mock Stroke Drill from October 19, 2016.



Sentara Save The Brain Campaign

Because every moment counts

Door to Treatment in ≤ 45 minutes



target times are shown at the bottom left.

SNGH MOCK STROKE ALERT DRILLS:

Wednesday,
October 19th at 0600
Friday,
October 21st at 1230
Monday,
October 24th at 0830

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SNGH BASIC STROKE CONCEPTS CLASS DATES:

September 20, 2016
December 20, 2016
March 21, 2017
June 14, 2017
September 13, 2017
December 13, 2017

FEEDBACK FROM FIRST CLASS:

*"Interactive and
engaging class."*

*"I really enjoyed this
course and it made me
feel much more knowl-
edgeable and comforta-
ble caring for stroke
patients."*

*"I feel that everything
was well explained and
thoughtfully prepared."*

*"Interactive, fun and
informative class."*

BASIC STROKE CONCEPTS CLASS NOW AT SNGH!

In response to requests from many stroke unit nurses, there is now a Basic Stroke Concepts class available at SNGH! This course will be offered several times throughout the remainder of 2016 and into 2017 (see dates to the left) and is designed to provide stroke unit

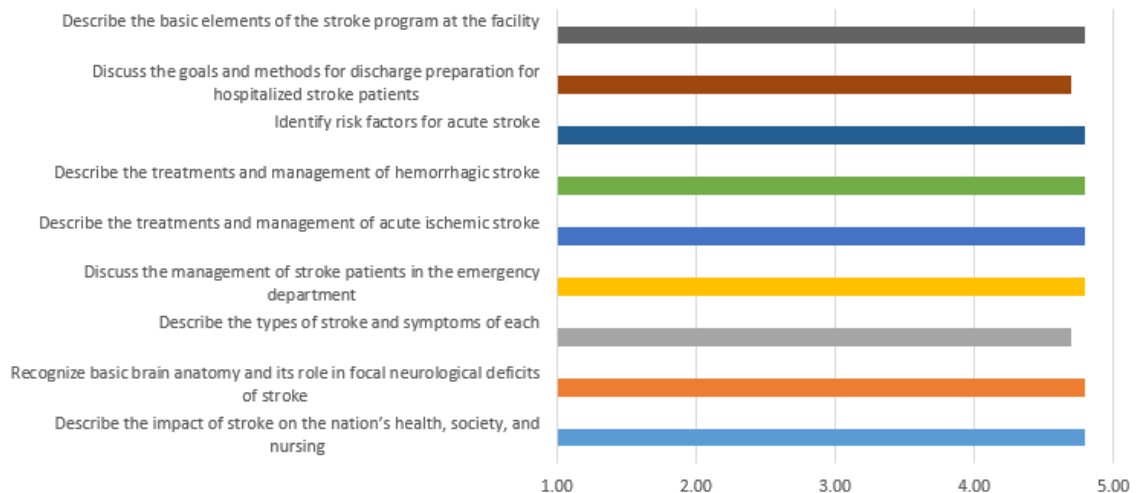
nurses an overview of stroke anatomy and physiology, emergency management, acute ischemic stroke management and complications, hemorrhagic stroke management and complications, stroke prevention and discharge planning, and provide an overview of the stroke program here at SNGH.

The class offers eight contact hours upon completion. Target audience for the class is new hires onto the stroke units, or current stroke unit nurses who wish to improve their current stroke knowledge. The first class was held on September 20th and received excellent reviews by the nurses who attended.

Space is limited for each class, so register in OneLink early if you would like to attend (search "SNGH Basic Stroke Concepts" in OneLink). Hope to see you there!



Evaluation Rating Average for SNGH Basic Stroke Concepts Objectives



SAVE THE DATE: MARCH 31, 2017 SENTARA STROKE SYMPOSIUM

The first system-wide Sentara Stroke Symposium will be held on March 31, 2017 at the Great Wolf Lodge in Williamsburg, Virginia. Please mark your calendars now! The symposium will host a variety of speakers and topics on stroke care.

More information will be provided as we get closer to the date. Please make plans to attend!



SENTARA NORFOLK GENERAL HOSPITAL

	Baseline	Nat'l Median	Nat'l Quartile	Previous Year	Current Year	Goal	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Stroke														
Venous Thromboembolism (VTE) Prophylaxis														
				99.2%	99.7%	98.0%	100.0%	98.3%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Discharged on Antithrombotic Therapy														
				98.7%	99.6%	99.0%	95.5%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Anticoagulation Therapy for Atrial Fibrillation/Flutter														
				92.2%	93.8%	97.0%	75.0%	100.0%	50.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Thrombolytic Therapy														
				87.5%	100.0%	90.0%		100.0%		100.0%	100.0%	100.0%		100.0%
Antithrombotic Therapy By End of Hospital Day Two														
				98.9%	100.0%	99.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Discharged on Statin Medication														
				99.1%	99.1%	99.0%	95.8%	96.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Stroke Education														
				94.8%	97.4%	96.0%	90.5%	100.0%	94.4%	100.0%	96.0%	100.0%	96.4%	100.0%
Assessed for Rehabilitation														
				100.0%	100.0%	99.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Dysphagia Screening														
				95.8%	99.2%	96.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	88.9%	100.0%
Door to Needle Median time for tPA														
				56.0	69.0	60.0	49.0	49.5		75.5	195.5	95.0		69.0
Door to Needle tPA within 60 Minutes														
				53.3%	38.5%	75.0%	100.0%	100.0%		0.0%	0.0%	33.3%		33.3%
Door to Needle tPA within 45 Minutes														
				20.0%	15.4%	50.0%	0.0%	50.0%		0.0%	0.0%	33.3%		0.0%
Stroke % Green (includes *) = Appropriate Care Measure														
				94.2%	97.9%	98.0%	92.7%	98.4%	95.7%	100.0%	97.7%	100.0%	97.7%	100.0%

STROKE PROGRAM OUTCOMES

SNHG has improved on many of the Stroke Program outcomes over the course of the year—especially the Stroke Core Measures. Our biggest opportunities lie in tPA administration times in the emergency department. The story on the front page highlights the plans to revise the ED Stroke Alert process to achieve a new target of 45 minutes for at least half of the tPA cases. Training is scheduled for October 2016 on the new process.

There are other opportunities for all hospital units for stroke patients. SNHG had its first swallow screen fallout for the year in July. Any patient that is admitted with neuro symptoms should pass a bedside swallow screen prior to receiving anything PO. The swallow screen is available in flowsheets, as “ED Swallow Screen.” The flowsheet will walk you through the steps of completing the swallow screen (see picture to the right).

If the patient fails this bedside screening, make the patient NPO, inform the physician, and receive an order for speech/language therapy (SLP). The SLP will then screen the patient further and provide recommendations.

Intervention	Stroke Outcome Mod Ra...	NIHSS	ED Swallow Screen
Mode: Accordion Expanded View All			
		Sentara Norfolk Ge...	Sentara ...
		10/3/16	10/12/16
		1812	2225
			1500
Pre-Swallowing Assessment			
Is patient awake and alert?	Yes	Yes	
Place/maintain in the upright/seated	Yes	Yes	
Is patient mouth/face symmetrical?	Yes	Yes	
Patient stick tongue out midline?	Yes	Yes	
Patient handing saliva/secretions?	Yes	Yes	
Patient close lips?	Yes	Yes	
Pt. swallows their saliva/secretion?	Yes	Yes	
Patient demonstrate clear voice?	Yes	Yes	
Patient cough on command?	Yes	Yes	
If all the answer are "Yes"	Yes	Yes	
Oral Check			
Mouth clean of food, mucas, vomitus?	Yes	Yes	
Swallowing Attempts			
Swallowing Attempts	w/3oz.(9...	w/3oz.(9...	
Small Sip of Water			
Is coughing and choking absent?	Yes	Yes	
Is throat clearing absent?	Yes	Yes	
Does voice remain clear?	Yes	Yes	
Larger Sip of Water			
Is coughing and choking absent?	Yes	Yes	
Is throat clearing absent?	Yes	Yes	
Does voice remain clear?	Yes	Yes	
Rest of the Water			
Is coughing and choking absent?	Yes	Yes	
Is throat clearing absent?	Yes	Yes	
Does voice remain clear?	Yes	Yes	
Swallowing Attempts			
If all the answer are "Yes"	Yes	Yes	



*Camilla Poulson, RN
Registered Nurse; 5RP
Stroke Unit,
Sentara Norfolk General*



Camilla has been a nurse with Sentara Norfolk General Hospital for almost 40 years. She has cared for hundreds of patients, but stroke patients hold a very special place in her heart.

MEET A TEAM MEMBER: CAMILLA POULSON

Camilla Poulson has been a member of Sentara Norfolk General (SNGH) for 38 years (since 1978!) . Camilla is a registered nurse (RN) on 5RP, one of the stroke stepdown units. Camilla graduated nursing school from the Norfolk General Hospital School of Professional Nursing in 1978. She states that she had to take her nursing boards on paper, and had to wait three months for the results! Camilla has stayed with SNGH for her entire nursing career. Her career has focused on stepdown and medical-surgical patient populations. When asked why she has decided to remain with this population so long, she states, “there is always something different and new.”

Stroke nursing, however, seem to choose Camilla rather than her choosing it. When she was 17, a nurse aide at the time, her maternal grandmother had a stroke in front of her on New Year’s Day. Camilla was able to quickly recognize the symptoms of stroke and respond by calling an ambulance because of her training. She states that this event really made her passionate

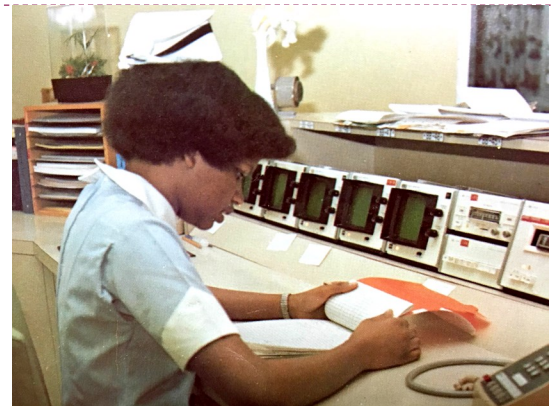
“Being a stroke nurse was my destiny. I love this population.”

-Camilla Poulson, RN

about stroke nursing. “Being a stroke nurse was my destiny,” Camilla says, “I love this population.”

Camilla says she enjoys seeing the progress patients make. “I think our stroke program is one of the best. I love the relationship with all the team members. Especially speech therapy– they make my day, always smiling.” Camila has made an impact on so many patients over the years– she still has one of her patients, who suffered a stroke 9 years ago, come to check in with her about his progress.

Camilla is one of many nurses who are the backbone of our stroke program here at SNGH. They truly change lives. Stop by 5RP and say hello!



Above: Camilla Poulson in 1978 at the nurses’ station. This picture was used for the nursing school brochure at the time.

Below: This is a picture of Sentara Norfolk General Hospital in 1978.



BEYOND IV TPA: ENDOVASCULAR STROKE INTERVENTION

No doubt you are familiar with IV tPA treatment for strokes. No doubt you are familiar with the many limitations and patient exclusions from IV tPA therapy. But, have you heard of a relatively new standard of care that has recently emerged for severe strokes in patients regardless of their IV tPA candidacy? It's called endovascular stroke intervention...

Severe strokes are commonly caused by blockages in large arteries that supply the brain. *A severe stroke is defined as severe hemiplegia and/or severe global aphasia.* When a large vessel stroke is suspected due to severe stroke symptoms, a CT angiogram can confirm large vessel occlusion. If a large vessel occlusion is found, then the patient can many times be treated by a stroke interventionalist who can emergently perform an endovascular stroke intervention such as a thrombectomy by accessing the femoral artery. This recently declared standard of care has been available at SNGH since 2006 and is now highly protocolized.

Time frame of symptom onset for endovascular intervention is up to 24 hours for MCA (middle cerebral artery) strokes, but can sometimes be up to 36 hours for basilar artery occlusions! A much longer timeframe than tPA. The stroke interventionalists rely on viable brain, more so than time of onset, particularly when someone awakens with symptoms. Exclusions to endovascular stroke intervention are large volume dead brain, large ICH (intracerebral hemorrhage), or severely impaired baseline function (such as advanced dementia, advanced stage active cancer).

For an instant 24/7/365 access or consult with a stroke interventionalist, you can call the operator on the emergency hotline. SNGH's stroke interventionalists have been treating 30-50 patients per year since 2006, a number that is steadily rising as more people become aware of this treatment option. The three interventionalists at SNGH are: Dr. John Agola (Interventional Neuroradiology), Dr. Wilson Daugherty (Neurosurgery) and Dr. Karah Lanier (Interventional Neuroradiology).

As more healthcare providers become aware of this highly effective treatment option, more patients will be spared the severely debilitating and devastating effects of stroke. In many instances, patients can be restored to baseline or near baseline neurological function after treatment and rehabilitation. Take the time to learn the signs of a severe stroke and how to engage the stroke interventionalist.



(Above) Dr. John Agola performing an emergent thrombectomy on a patient.
(Below) Picture of blood flow being restored in the right middle cerebral artery.



(Above) Dr. John Agola and Dr. Karah Lanier with a Wake Up Stroke patient three months after her endovascular procedure. She was not a tPA candidate and had the procedure 18 hours after last known well!



(Left) One of Sentara Norfolk General's Stroke Interventionalists, Dr. Wilson Daugherty, Neurosurgeon, joined Sentara Neurosurgery Specialists in 2015.

CALLING ALL ARTISTS... WILL YOU SHARE A STORY?

Stroke recovery can be challenging, and each survivor has a unique story. Sentara RMH paired stroke survivors with artists to capture these stories with artwork in an exhibit called, "Strokes of Distinction." SNGH is looking to host another exhibit recognizing our local stroke survivors and sharing their experiences and unique story through art.

We are looking for artists of all kinds (watercolor, sketch, paint, sculpture, photography, etc.) to participate. These artists would be paired with a stroke survivor for a session to allow the survivor to share their story. The artist would then create a piece representing their story. These pieces would be displayed in the hospital, as well as other locations throughout Hampton Roads. If you or someone you know is an artist that would like to participate in this event, please contact Sarah Cullen, stroke coordinator, at ssculle1@sentara.com.



Read more about the Sentara RMH "Stroke of Distinction" art exhibit at: <http://news.heart.org/art-show-offers-stroke-survivors-a-platform-to-share-experiences/>

RESEARCH UPDATE: ASSOCIATION OF SECONDHAND SMOKE WITH STROKE OUTCOMES

Published in the October 2016 American Heart Association's journal *Stroke*, this study aimed to determine the prevalence of exposure to SHS among those with and without stroke and its impact on mortality. Approximately half of "never" smokers are exposed to secondhand smoke. In the study, survey data was obtained from 27,836 "never" smokers from 1988 to 1994 and 1999 to 2012. Independent relationships between SHS and all-cause mortality were assessed using Cox regression models, before and after adjusting for sociodemographics and comorbidities.

Results from the study found that high exposure to secondhand smoke was associated with higher odds of previous stroke. Also, there was a dose-dependent relationship between exposure to secondhand smoke and all-cause mortality after stroke. Researchers concluded individuals with previous stroke have 50% greater odds to have been exposed to secondhand smoke and secondhand smoke is associated with a 2-fold increase in mortality after stroke. This study highlights the importance of obtaining exposure to secondhand smoke history and counseling patients and their families on the potential impact of secondhand smoke on post-stroke outcomes.

Read more at: <http://stroke.ahajournals.org/content/early/2016/10/11/>





Sarah Cullen, stroke coordinator, teaching children from Tidewater Park Elementary School the "FAST" stroke song.

Tidewater Park Elementary School



COMMUNITY OUTREACH: ELEMENTARY SCHOOL F.A.S.T. TEACHING

On July 14th, SNGH was host to 30 children from Tidewater Park Elementary School, a part of Norfolk Public Schools. These 30 children spent the afternoon learning about various health topics and hospital services. One of these health topics was stroke recognition.

According to a recent national survey conducted by the Ad Council, 28% of Americans did not know any stroke warning signs or symptoms. The survey also showed that 46% of participants were not confident that they knew what to do if they, or someone they were with, felt (or exhibited) symptoms of stroke. Children can be vital in recognizing stroke symptoms in their family members.

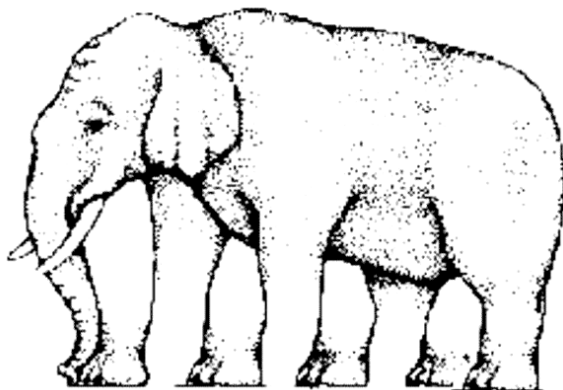
The Stroke Coordinator taught the F.A.S.T. Stroke Song to the 30 children (pictured on the left) as a memory tool for recognizing and responding to stroke symptoms. Out of the 30 children that attended, four knew of someone in their immediate family that had suffered from a stroke. The children also learned about the different types of stroke, and how often strokes occur (once every 40 seconds!).

Interested in leading or facilitating a stroke community outreach event? Contact Sarah Cullen, stroke coordinator, at ssculle1@sentara.com.

THE F.A.S.T. STROKE SONG

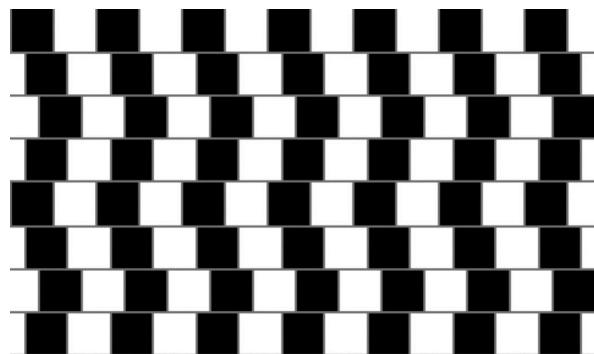
(Tune: Row, row, row your boat)

Face, Arms, Speech, and Time
Know the Signs of Stroke
So you can call 9-1-1
And you can save someone!



How many legs does this elephant have?

BRAIN GAMES



Are the horizontal lines straight or crooked?

SNGH STROKE PROGRAM WAVENET SITE:

SNGH Stroke Program now has its own Wavenet page! The site is a great resource for stroke employee education, patient education, policies, community events and resources, as well as program performance and information.

<https://wavenet.sentara.com/lob/hospitals/sngh/stroke>



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COORDINATOR'S CORNER

This past quarter has been a busy one for the stroke program here at SNGH. We have been redesigning the stroke alert process for the hospital, responding to the challenges in our tPA administration cases in the ED. A big thank you to all the support from the Emergency Department and the Neuro ICU on planning the revision and training processes! It was a great team effort. I know I am very excited to participate in the Mock Stroke Alert Drill training this month. We have a great team at SNGH, and this new process is going to be a wonderful way to pull this team together efficiently and quickly.

The first Basic Stroke Concepts class was completed last month. Thank you to the 6K nurses Kim, Dayna, Roberto, Kerri, Natalie, Brittany, Sam, Masha, Hope, and Morgan for being the first nurses through the course and providing such great feedback on the class. I appreciate you all taking the time to attend and being active participants! I am looking forward to the next class in December. I am hoping to start a monthly Stroke Education web-ex in the next month or so that will provide additional education opportunities for the staff. Stay tuned for more information soon!

I am also hoping to have a "Stroke Ambassador" program assembled before the end of the year. This will be resources (presentations, handouts, etc.) for staff who wish to spread stroke awareness in your community. The more people we can inform, the more brains we can save!

Thank you all for being a great team,

-Sarah Cullen, SNGH Stroke Coordinator

Stroke Meeting Calendar

Monday	Tuesday	Wednesday	Thursday	Friday
Stroke Rounds 1030-1200		System Stroke Meeting 0700-0800 (1st Weds)	Stroke Rounds 1030-1200	
Stroke Rounds 1030-1200	Stroke Quality 0700-0800 (2nd Tues)		Stroke Rounds 1030-1200	
Stroke Rounds 1030-1200			Stroke Rounds 1030-1200	
Stroke Rounds 1030-1200		Stroke Ops 0700-0800 (4th Weds)	Stroke Rounds 1030-1200	
Stroke Rounds 1030-1200			Stroke Rounds 1030-1200	