Peace River Community Health Centre

Quality Improvement & Clinical Research
Alberta Stroke Program

The Team

- **Rachel Peveril**, OT: Stroke Coordinator
- **Mona Diebert**: DI Supervisor
- **Nicole Glavine**: ED nurse
- **MC Cote**: EMS
- **Grant Popielarz**: EMS
- **Mark Kirby**: EMS
- **Ashley Malarczuk**: Nurse Educator
- **Carol Benson**: ED manager
- **Dave Welch**, MD: Physician
- **Hussain Aboud**, MD: Physician
- **Imran Ghauri**, MD: Physician

Staff Communication

Peace River Community Health Centre Stroke Newsletter

Peace River is engaged in the QuICR quality improvement initiative to lower door-to-needle times for acute stroke patients eligible for tPA. The provincial goal is to improve patient outcomes by reducing median door-to-needle times for tPA to 30 minutes.

CONGRATULATIONS to the emergency department staff who treated an acute stroke patient with a *door-to-needle time of 39 minutes* in May! Keep up the great work!

Stroke Month

June was stroke awareness month. This year the Heart & Stroke Foundation profiled the connection between stroke and dementia. **1 in 3 Canadians will develop stroke, dementia, or both.** Preventing stroke can prevent dementia. Learn more about stroke risk factors and how to promote good brain health at heartandstroke.com. The full dementia-stroke report can also be found on the website.

Heart & Stroke Big Bike June 29, 2016
'Code Blue – An Accident Waiting To Happen' team participants after the Big Bike ride in Peace River

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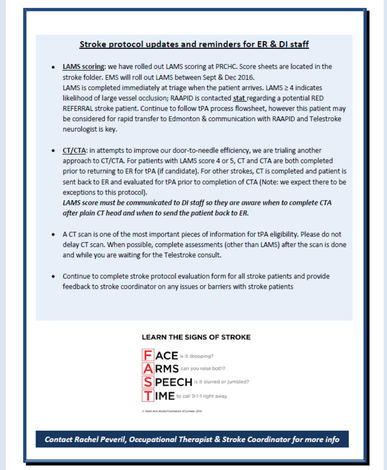

Stroke protocol updates and reminders for ER & DI staff

- **LAMS scoring**: we have rolled out LAMS scoring at PRCHC. Score sheets are located in the stroke folder. EMS will roll out LAMS between Sept & Dec 2016.
  LAMS is completed immediately at triage when the patient arrives. LAMS ≥ 4 indicates likelihood of large vessel occlusion; RAAPID is contacted stat regarding a potential RED REFERRAL stroke patient. Continue to follow tPA process flowsheet, however this patient may be considered for rapid transfer to Edmonton & communication with RAAPID and Telestroke neurologist is key.
- **CT/CTA**: in attempts to improve our door-to-needle efficiency, we are trialing another approach to CT/CTA. For patients with LAMS score 4 or 5, CT and CTA are both completed prior to returning to ER for tPA (if candidate). For other strokes, CT is completed and patient is sent back to ER and evaluated for tPA prior to completion of CTA (Note: we expect there to be exceptions to this protocol).
  LAMS score must be communicated to DI staff so they are aware when to complete CTA after plain CT head and when to send the patient back to ER.
- A CT scan is one of the most important pieces of information for tPA eligibility. Please do not delay CT scan. When possible, complete assessments (other than LAMS) after the scan is done and while you are waiting for the Telestroke consult.
- Continue to complete stroke protocol evaluation form for all stroke patients and provide feedback to stroke coordinator on any issues or barriers with stroke patients

LEARN THE SIGNS OF STROKE

FACE is it drooping?
ARMS can you raise both?
SPEECH is it slurred or jumbled?
TIME to call 9-1-1 right away.

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Contact Rachel Peveril, Occupational Therapist & Stroke Coordinator for more info

Changes Implemented

EMS Communication:

- EMS pre-alert form
  - Worked with local EMS to establish consistency with pre-alert to ED when en route
  - Nursing used form to gather key information and alert other departments prior to patient's arrival
- EMS aware to place18 gauge IV (for CTA)

Improved Documentation & Data Collection:

- Inadequate data collection process prior to QuICR initiative
- Nursing staff are now tracking times and any concerns that need follow-up for every stroke.

North Zone Algorithm:

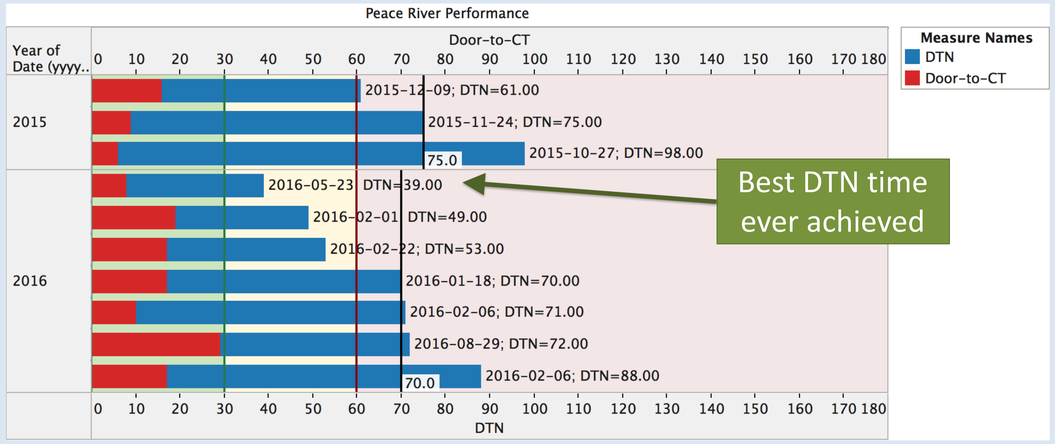
- Improved use of stroke algorithm/process flow
  - 'SWARM' on arrival now used, followed by direct-to-CT approach
  - Calls to RAAPID more efficient (first call made when patient goes to CT)
  - Calls back to RAAPID when response is delayed
    - Achieved quicker response times from RAAPID/telestroke

CT/Imaging improvements:

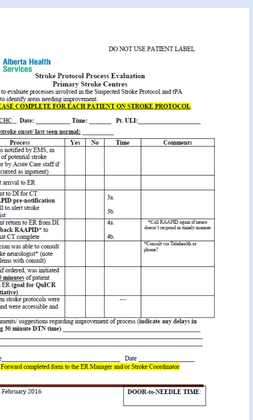
- Peace River is trialing an approach for CT only prior to tPA when LAMS <4 and CT & CTA prior to tPA when LAMS 4 or 5.
- Due to low stroke numbers over summer months we have not yet established if this approach will improve our DTN times.

Education:

- New nurse educator position in Peace River (Spring 2016) has enhanced nursing education opportunities on site
- Stroke coordinator & nurse educator visited four surrounding sites in June to provide education on stroke processes and best practice care
- Peace River continues to work with the non-primary stroke centres in our area to improve use of stroke protocol and improve patient care



Best DTN time ever achieved



DO NOT USE PATIENT LABEL

Alberta Health Services

Stroke Protocol Process Evaluation
Primary Stroke Centres

Purpose: to evaluate processes involved in the Suspected Stroke Protocol and tPA protocol to identify areas needing improvement

PLEASE COMPLETE FOR EACH PATIENT ON STROKE PROTOCOL

Site: PRCHC Date: _____ Time: _____ Pt. ULI: _____

Time of stroke onset/ 'last seen normal: _____

Process	Yes	No	Time	Comments
1. ER was notified by EMS, in advance, of potential stroke patient (or by Acute Care staff if stroke occurred as inpatient)				
2. Patient arrival to ER				
3a. Patient to DI for CT 3b. **RAAPID pre-notification** phone call to alert stroke neurologist			3a. 3b.	
4a. Patient return to ER from DI. 4b. **Call back RAAPID*** to inform that CT complete			4a. 4b.	*Call RAAPID upon if neuro doesn't respond in timely manner
5. Physician was able to consult with stroke neurologist* (note any problems with consult)				*Consult via Telehealth or phone?
6. tPA, if ordered, was initiated within 30 minutes of patient arrival to ER (**goal for QuICR DTN initiative**)				
7. Written stroke protocols were utilized and were accessible and clear			---	

Any comments/ suggestions regarding improvement of process (**indicate any delays in achieving 30 minute DTN time**) _____

Signature_____ Date _____

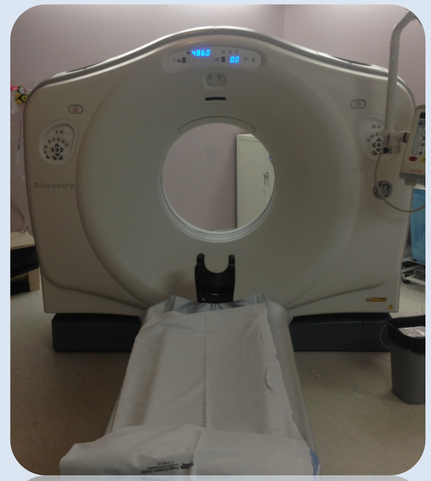
Forward completed form to the ER Manager and/or Stroke Coordinator

Updated February 2016

DOOR-to-NEEDLE TIME:

Trauma Room & Telehealth equipment

CT Scanner



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