

Evaluation

For the **Provincial Stroke Rounds Planning Committee:**

- To plan future programs
- For quality assurance and improvement
- For **You:** Reflecting on what you've learned and how you plan to apply it can help you enact change as you return to your professional duties
- For **Speakers:** The responses help understand participant learning needs, teaching outcomes and opportunities for improvement.



Please take 2 minutes to fill the evaluation form out.

Thank you!

Making Stroke Education Fit for Purpose:

Priorities and Approaches for Educating Healthcare Professionals

Speaker:

Kristina Moro

Clinical Nurse Specialist

Question Panel:

Tara Lewis

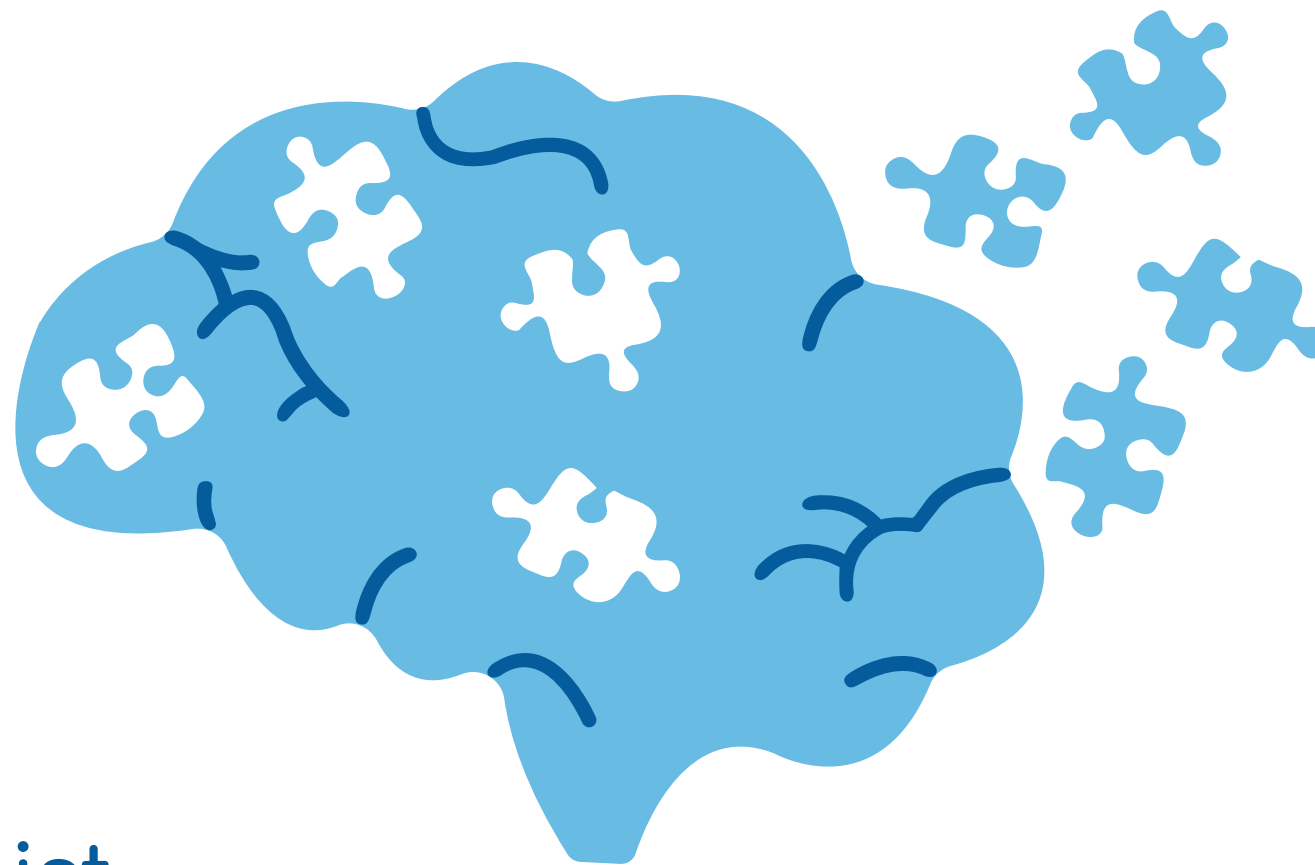
Rehabilitation Specialist

Keli Cristofaro

Community Engagement Specialist

Brittney McLaughlin

Inter-professional Educator



Thunder Bay Regional
Health Sciences
Centre



NORTHWESTERN ONTARIO
Regional Stroke Network



Disclosure of Affiliations, Financial Support, & Mitigating Bias

Speaker Name: Kristina Moro

Affiliations:

I have no relationships with for-profit or not-for-profit organizations

Financial Support: None



A graphic of a clipboard with a grey clip at the top, holding a white sheet of paper. The paper is framed by a thick blue border. The title 'Learning Points' is written in a large, blue, cursive font on the paper.

Learning Points

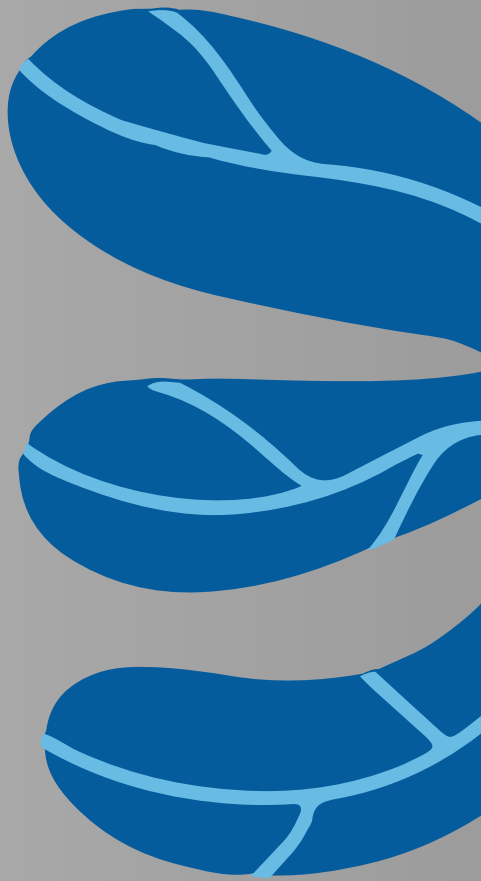
To explain different teaching strategies

To demonstrate education successes and challenges

To compare education initiatives within various healthcare professional locations

Three horizontal, wavy blue lines at the bottom center of the page.

*Brag, Borrow
and Steal*



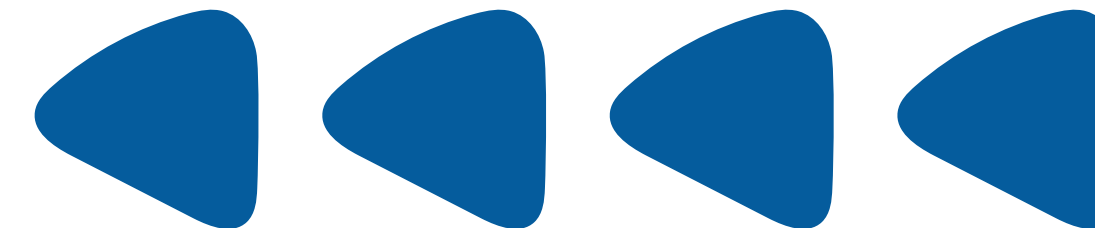
Challenges



Challenges In Education

Geography

80% of Ontario's Land Mass
2% of Ontario's Population



Challenges In Education

Time Zones

Northwestern Ontario Region

Eastern Time (EST)

Central Time (CST)



Challenges In Education

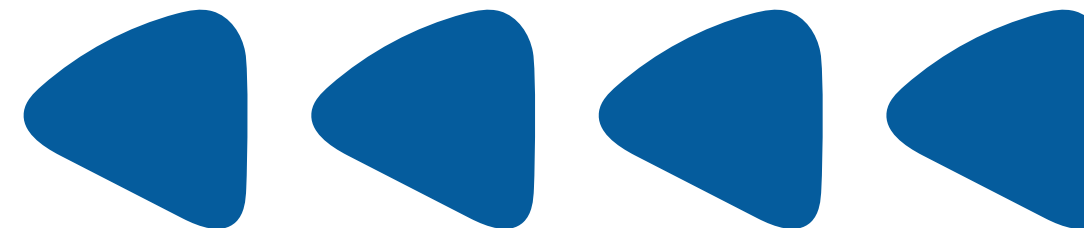
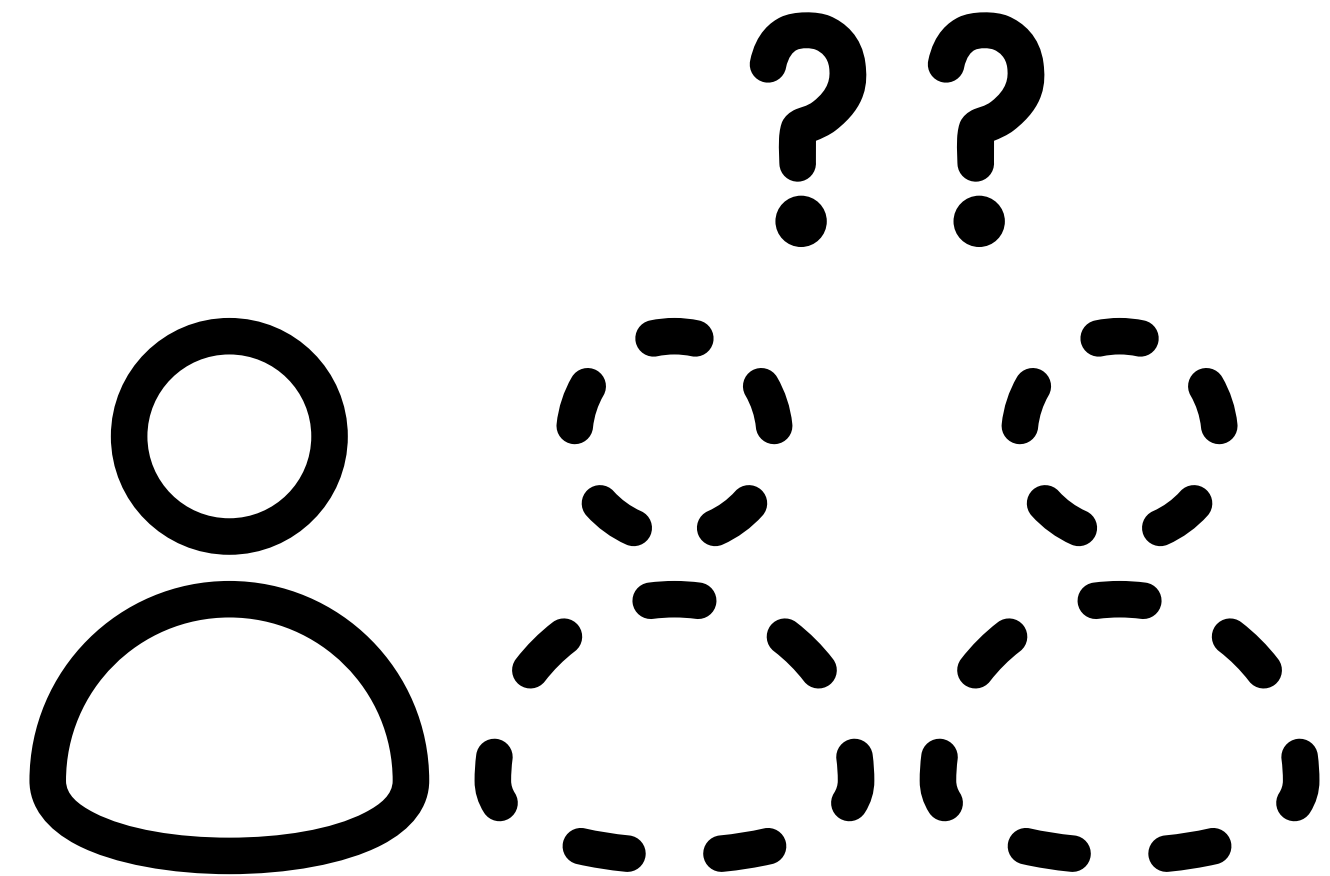
Time Zones



Challenges In Education

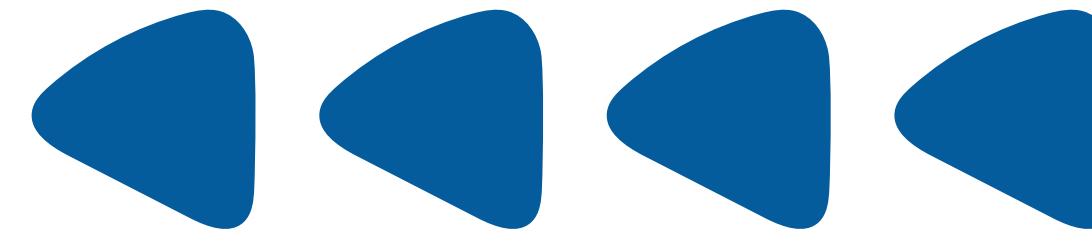
Health Human Resources

SHORTAGE



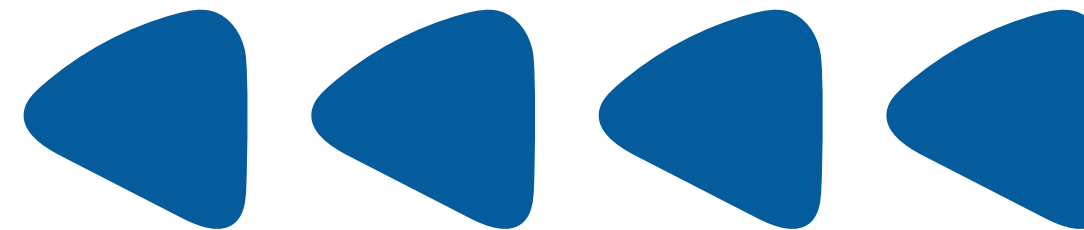
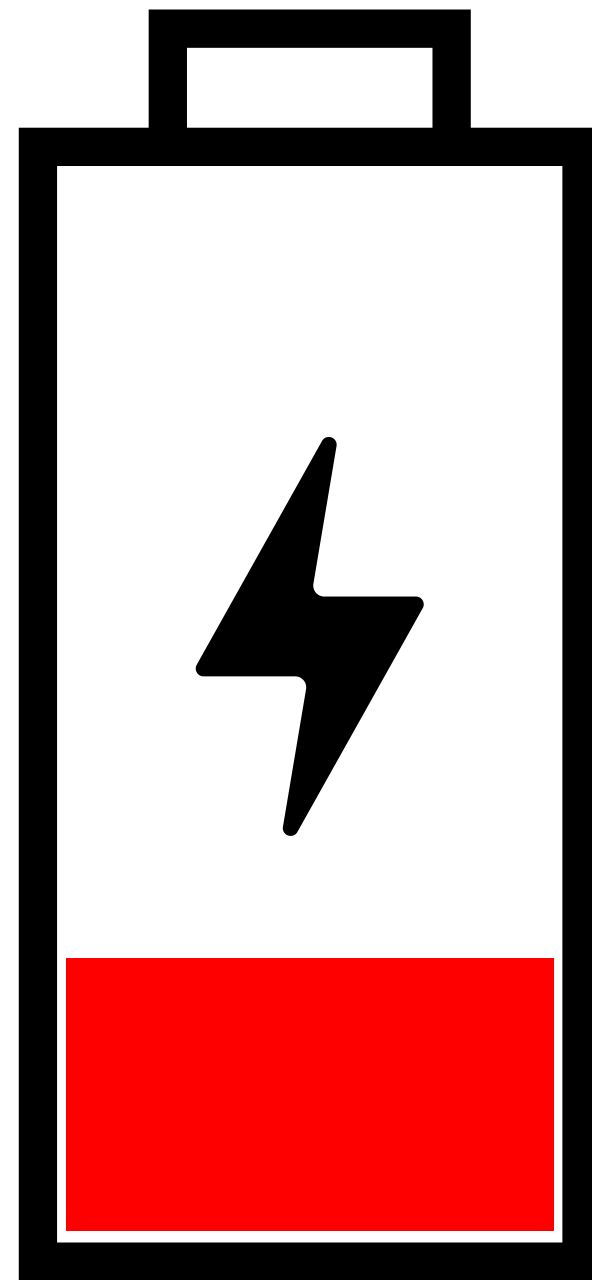
Challenges In Education

High Acuity



Challenges In Education

Low Engagement



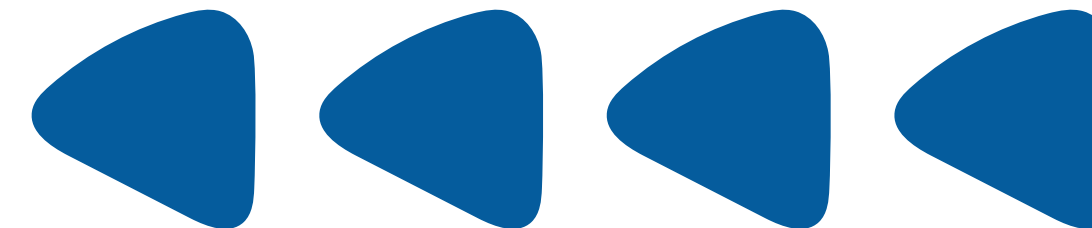
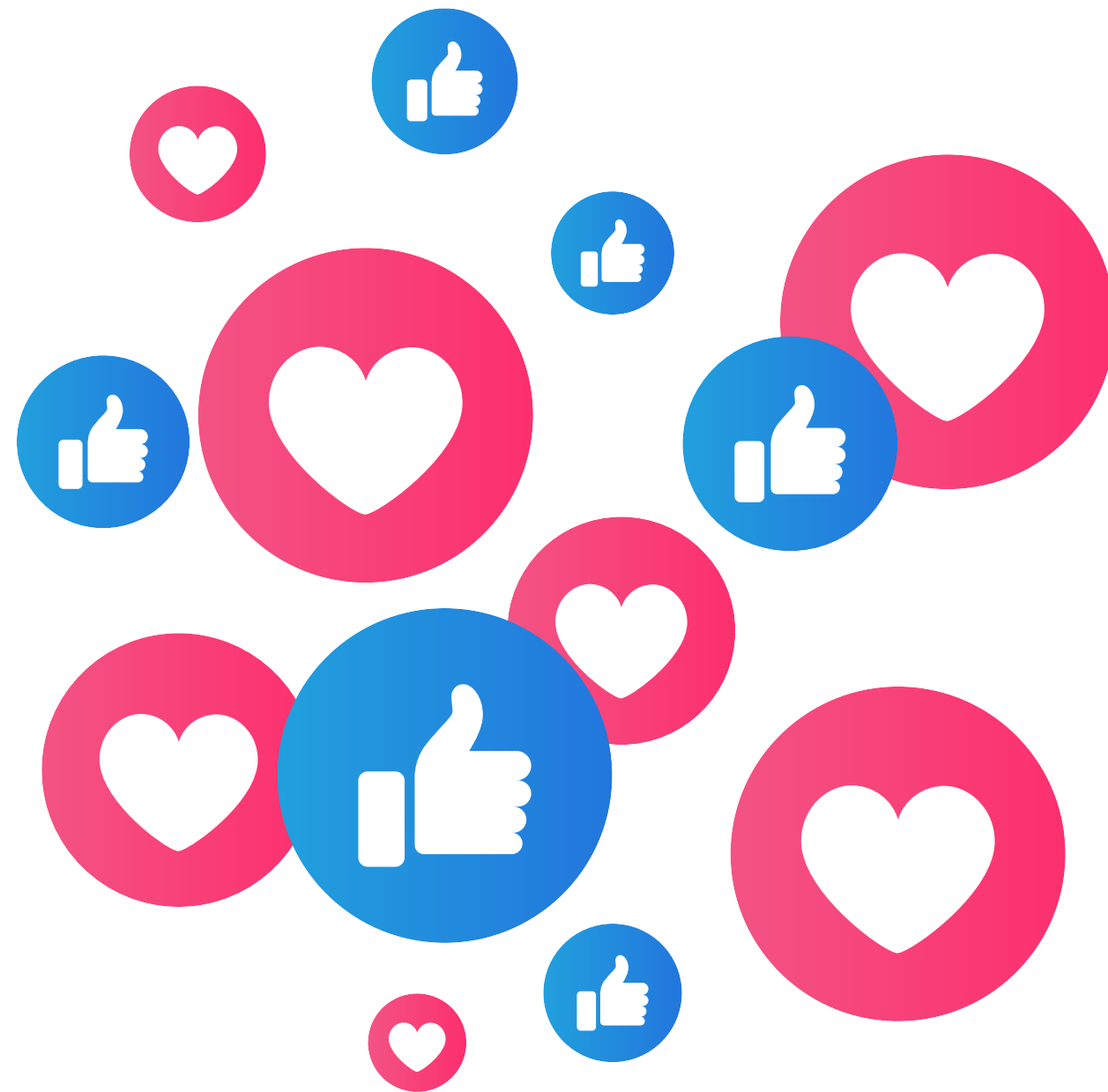
Challenges In Education

Generational Difference



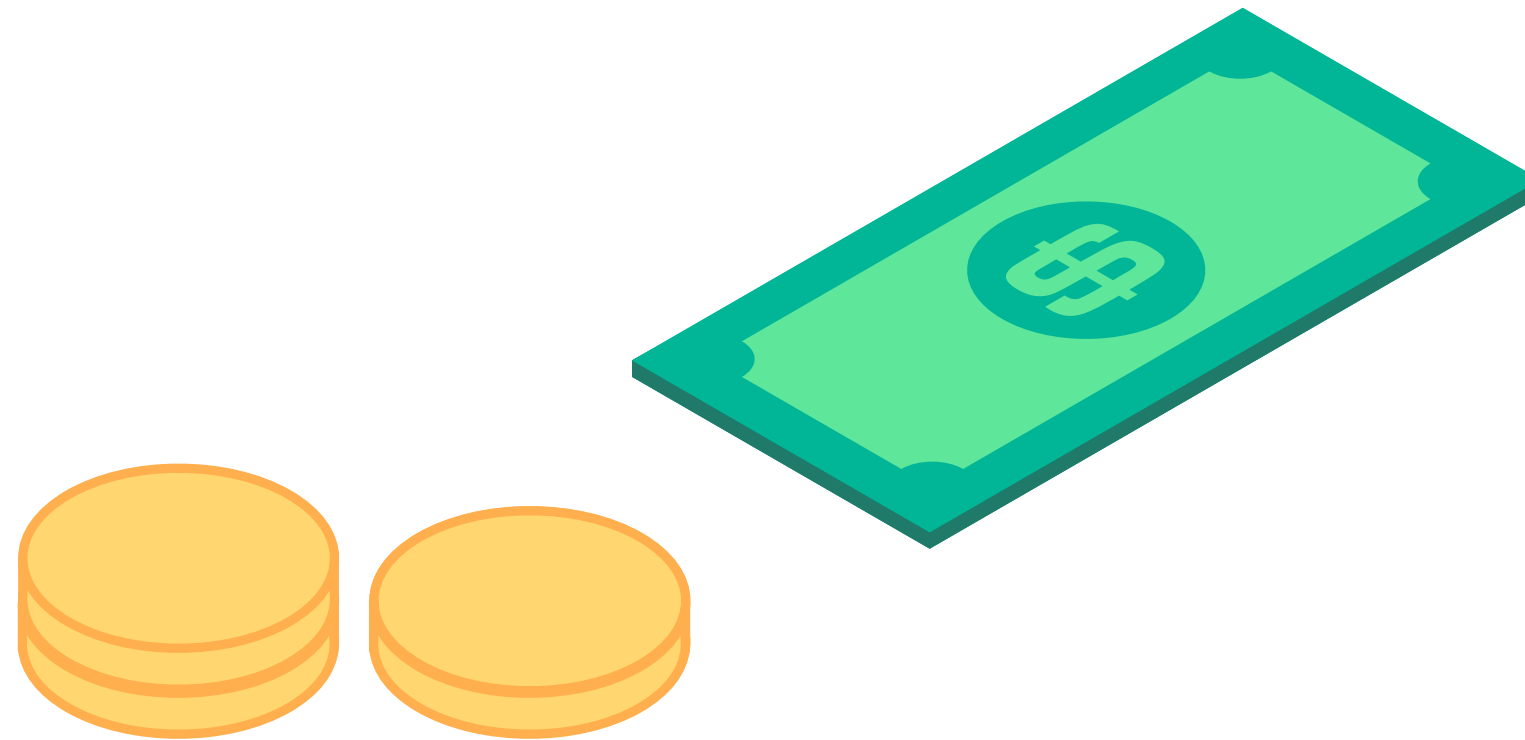
Challenges In Education

Social Media Culture



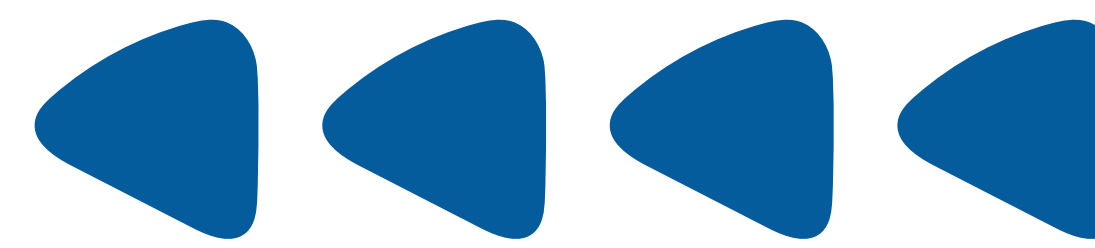
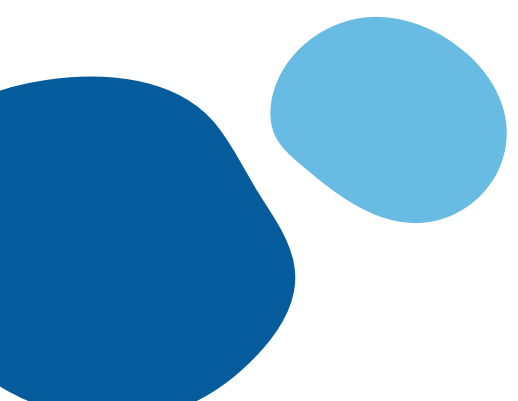
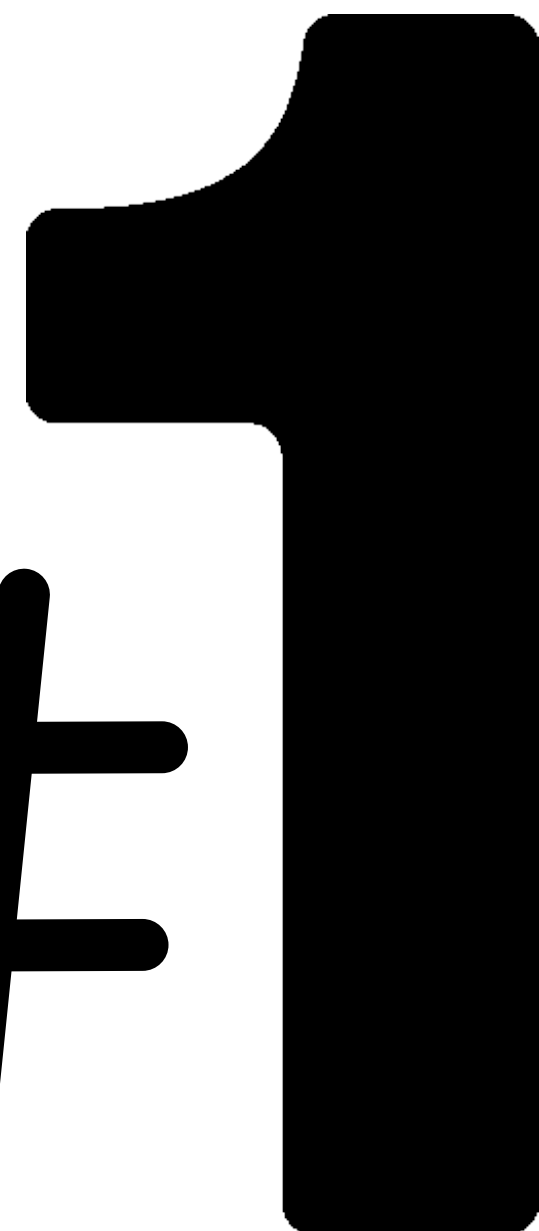
Challenges In Education

Financial Support



What is your **number**
one challenge to
providing education in
your region?

#



Themes



For the Health Care Professional



Awareness & Prevention



Pre-Hospital & Acute Care



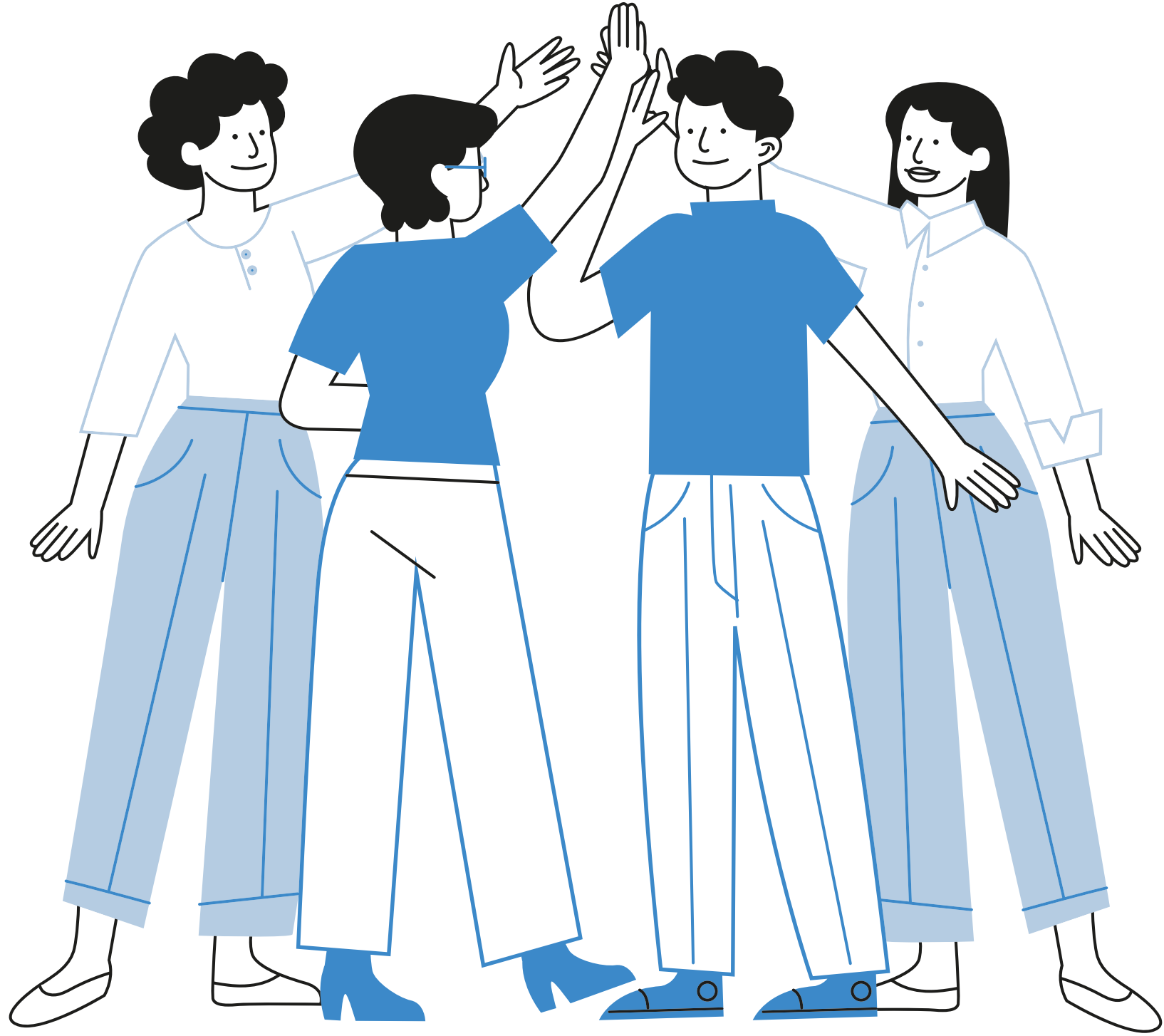
Rehabilitation & Community

For the Public



Resources for patients and caregivers

Education Themes Cross Care Continuum



Education Themes

Collaboration



Education Themes

Innovation and Creativity



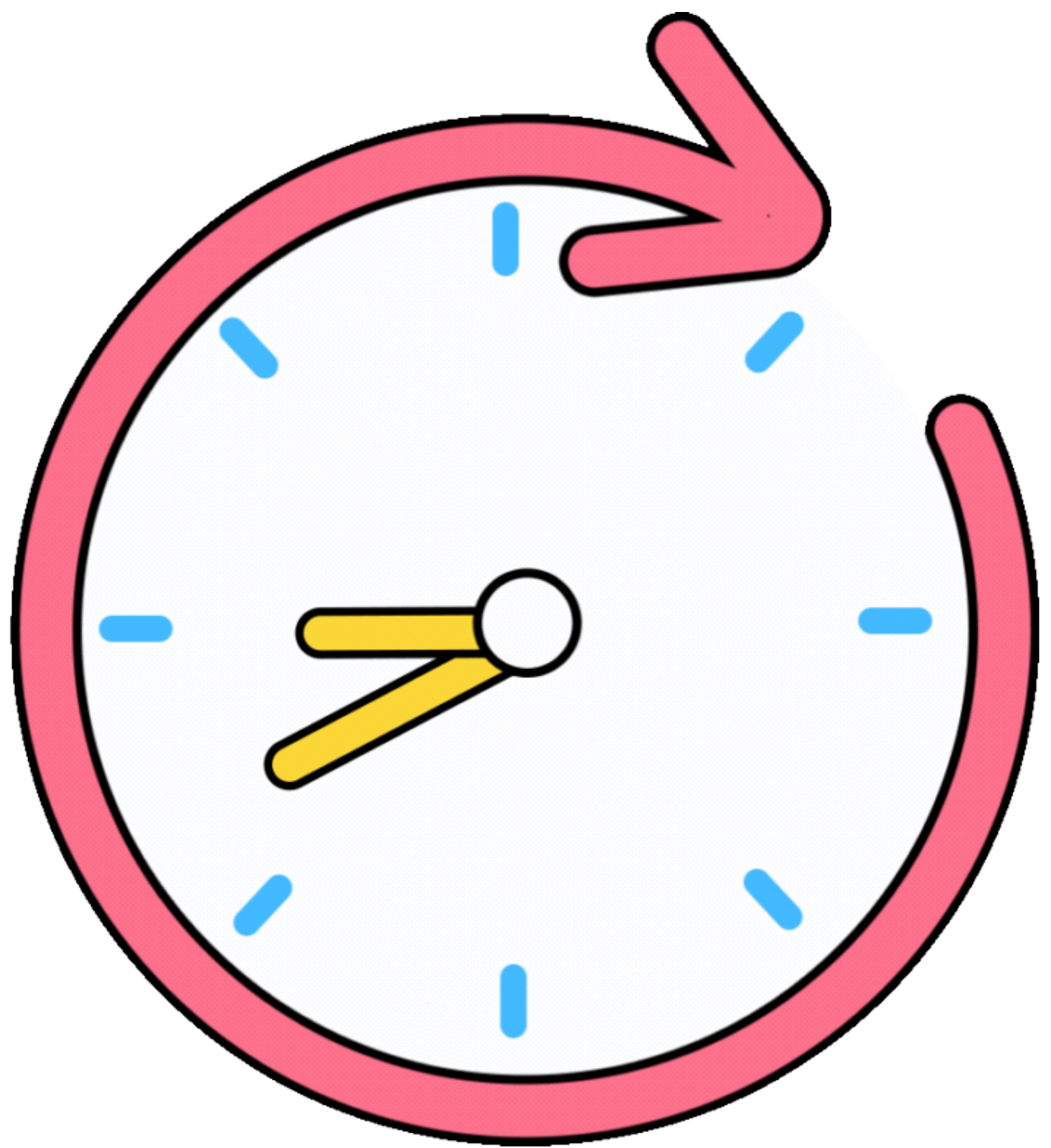
Education Themes

Fast Messaging



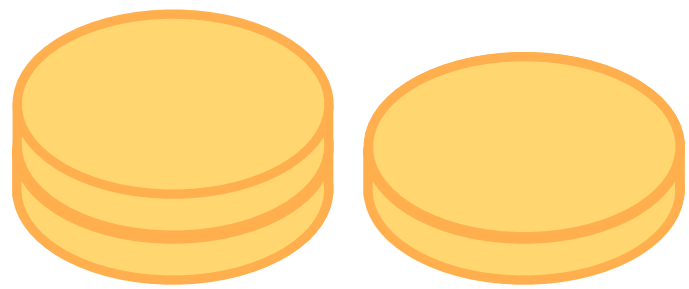
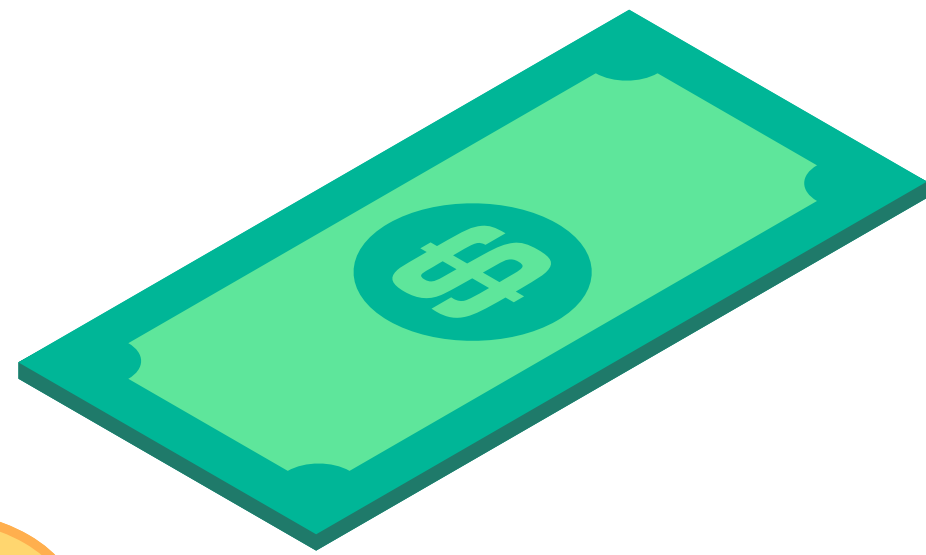
Education Themes

Teaching Strategies



Education Themes

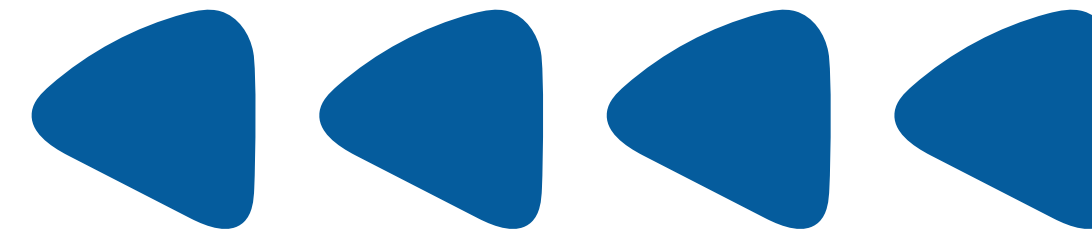
Timing



Education Themes

Financial Support

How have **you** changed
the way you provide
education to meet the
ongoing challenges in
health Care?



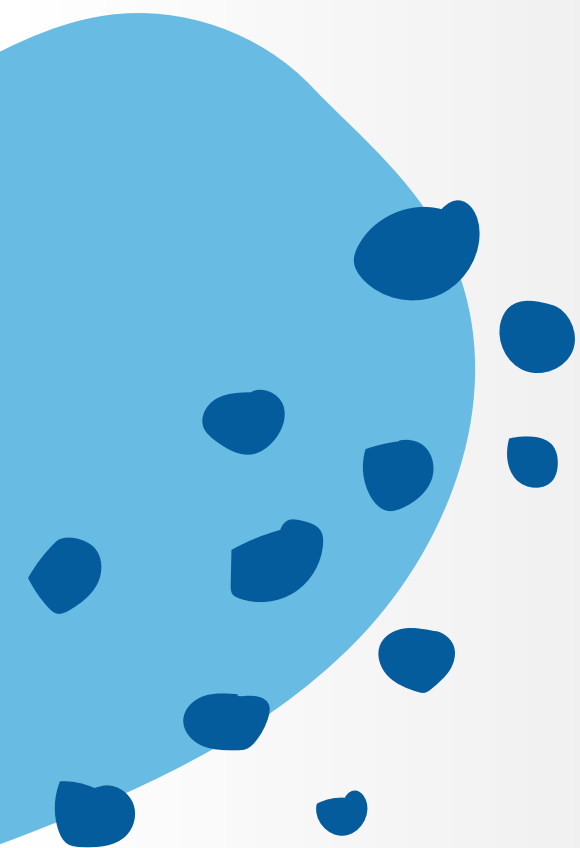
Canadian Stroke Best Practices

How does this relate?

Doesn't matter how well your **system** is build
if people do not know how and when to
access it, it wont work!

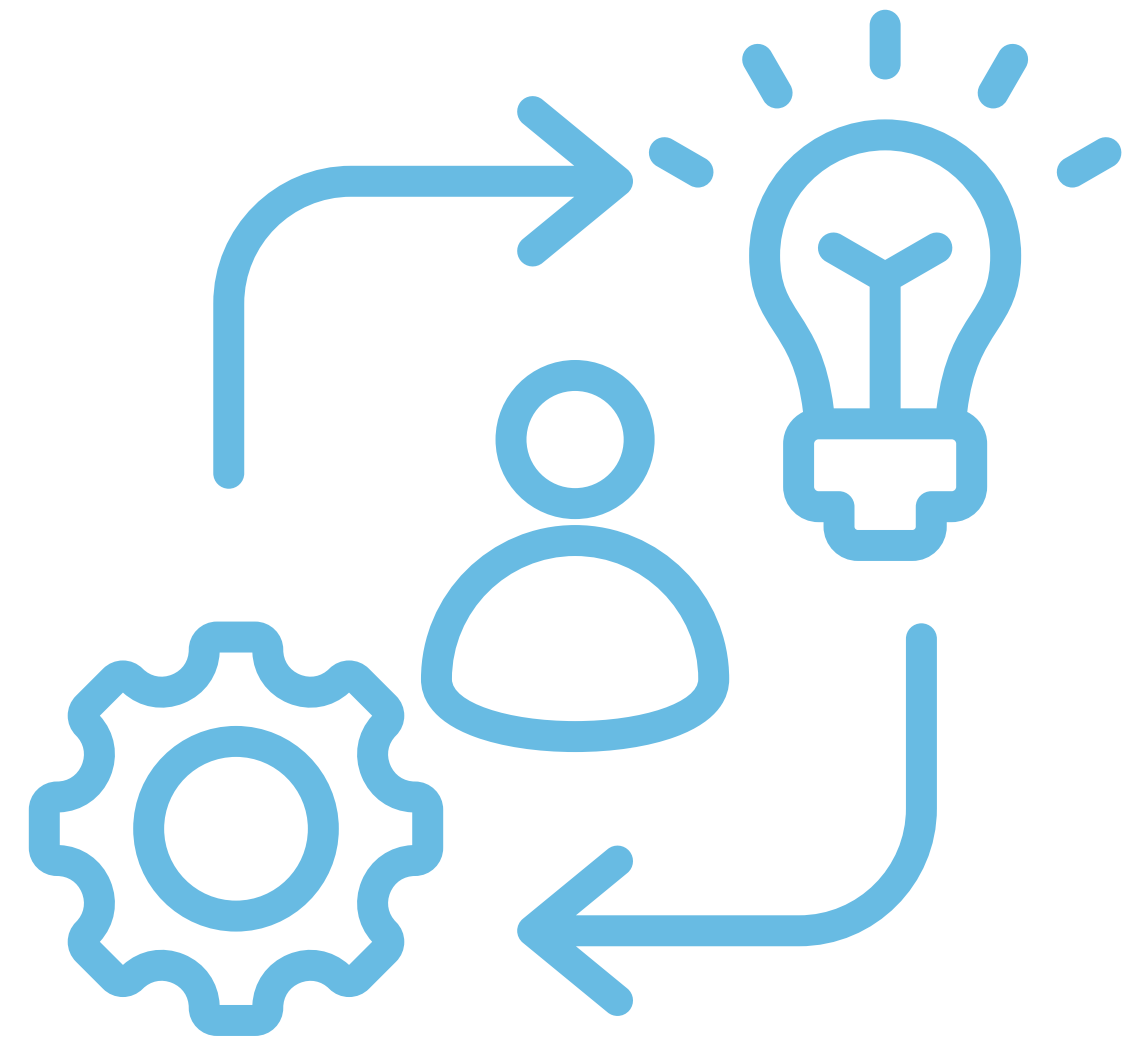


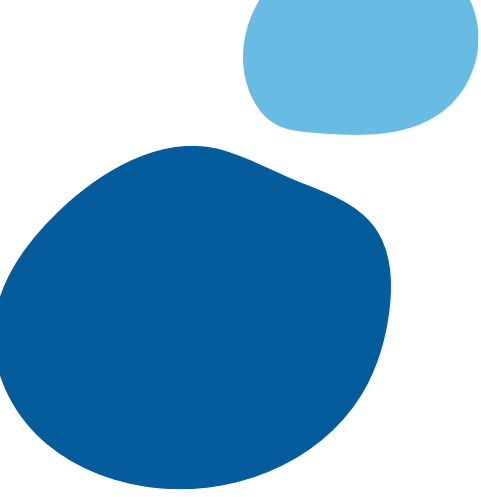
Successes



Initiatives

1. Nursing Orientation
2. Stroke Month Rehab Collaboration
3. REFS - Roaming Education For Staff
4. Regional Stroke Tour





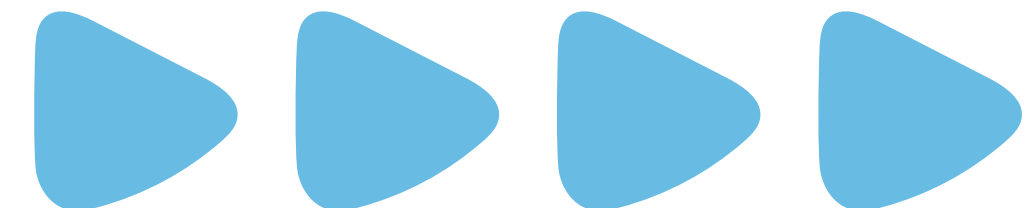
Nursing Orientation



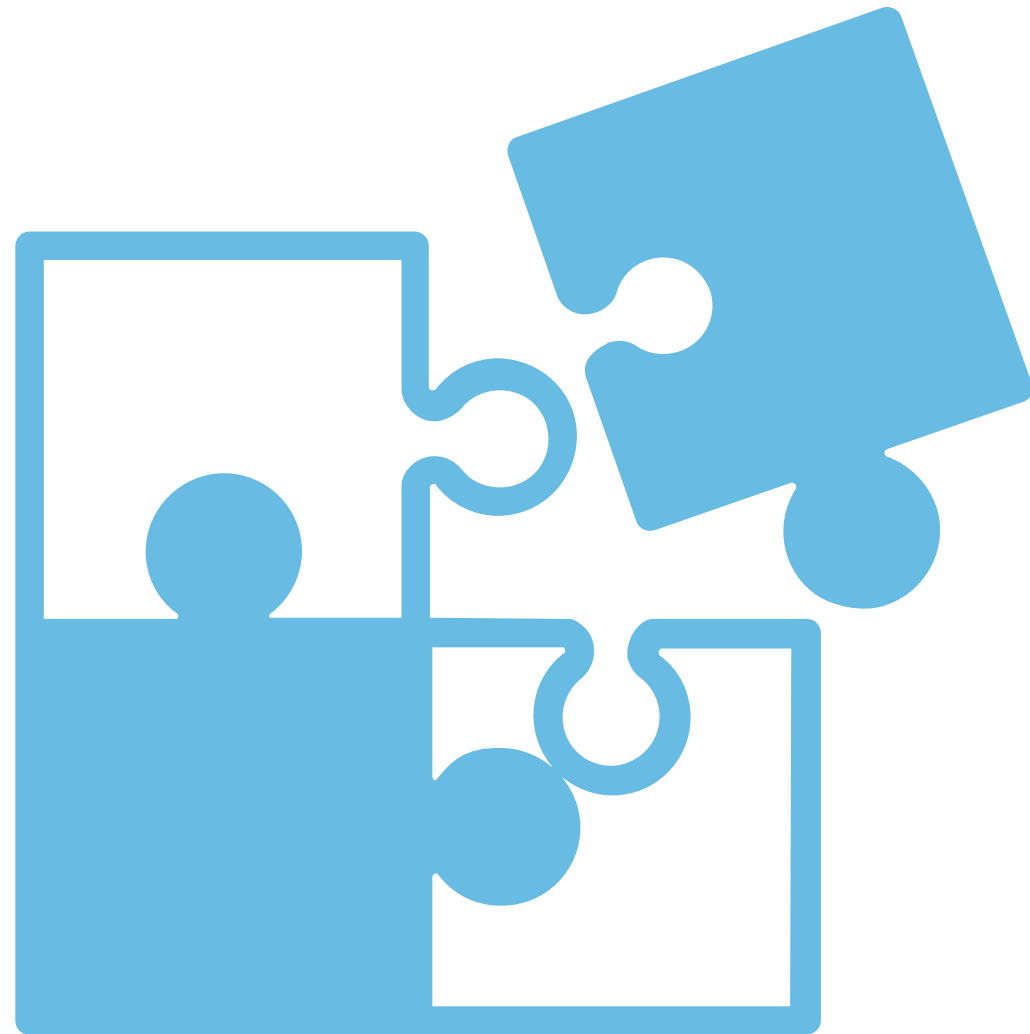
Nursing Education



Miller's Pyramid

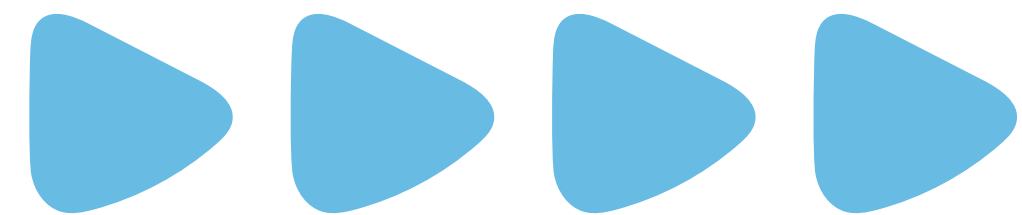



Nursing Education



Phased Approach

- Nursing on-boarding
- Unit specific orientation
- Specialized education
- Hemispheres
- Safety huddles on real time scenarios





Nursing Education



Hospital On-Boarding Unit Specific Education Specialized Education In the Moment Education



Nursing Education

Ongoing
Monthly



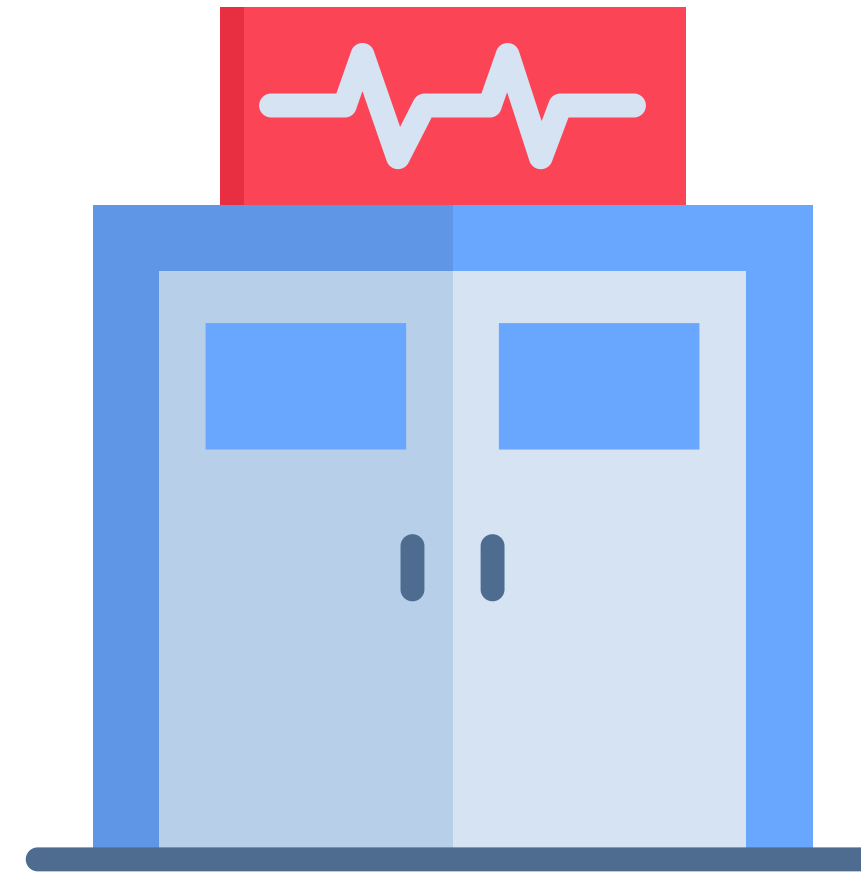
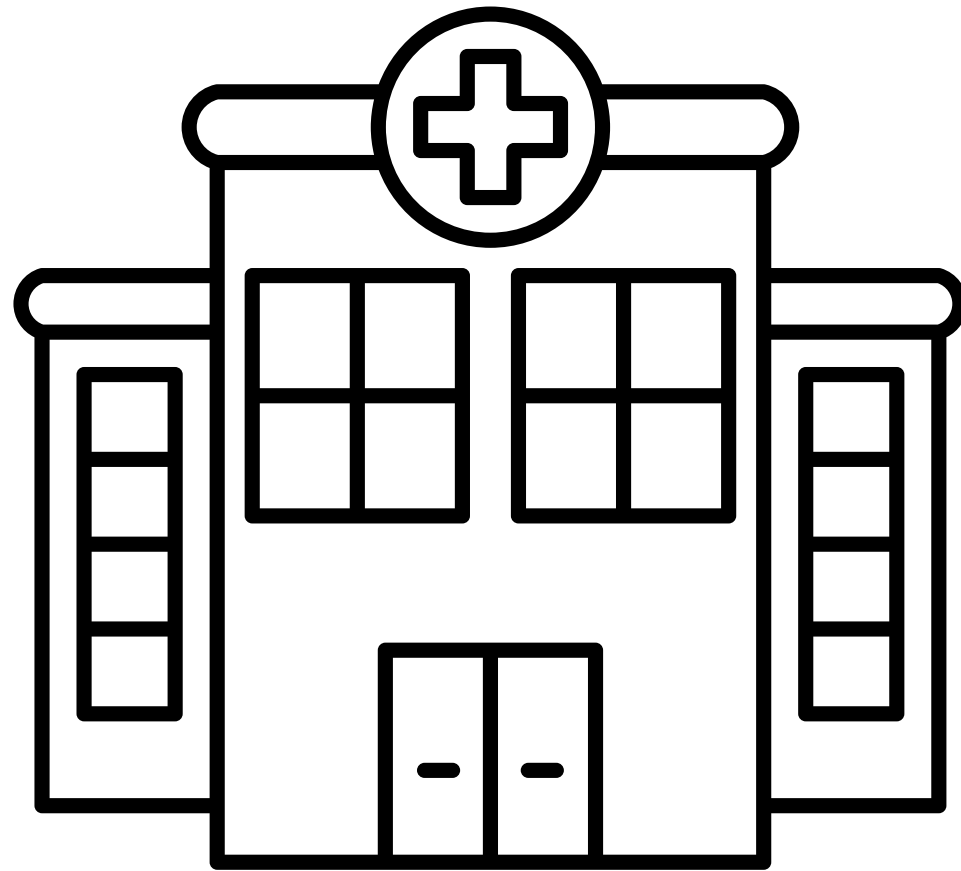
Stroke Month

Rehab Collaboration



Stroke Month Collaboration

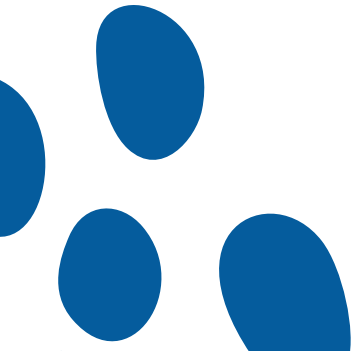
Linked Pre-Hospital Services with Rehab Hospital



Stroke Month Collaboration

Collaboration with Rehab Hospital

- **Timing: Stroke Month**
- **Attending Established Meetings**
- **Virtual Resources**
- **Fast Messaging**
- **Stroke Awareness**



Stroke Month Collaboration

Collaboration with Rehab Hospital

- Roaming Education (8 Units)
- Fast Messaging
- Stroke Awareness

Safety Huddle Stroke Month

Signs of Stroke

F



FACE

Is it drooping?
Ask the person to smile

A



ARM

Is one arm weak?
Ask the person to raise both arms

S



SPEECH

Is speech slurred?
Ask the person to repeat a simple sentence

T



TIME

What is the time last known well?
Time to call 911!

What do YOU do?

- Confirm Patient is having at least ONE of the clinical signs of stroke
- Determine when the patient was last known to be well
- ****last time you or someone else saw them without their new symptoms****
- Call the most responsible MRP to discuss urgent transfer to TBRHSC for stroke work up
 - Stroke treatment is time sensitive - do not delay transfer! Call EMS!
 - Clear documentation for the emergency department on symptoms and last known well using the SJCG-ED transfer note. Add print out of note, copy of MAR and copy of DNR (if applicable) to transfer envelope
 - Assess and monitor client until EMS arrives - ensure someone remains with client until transferred

What to say to the 911 dispatcher

- Your name & location
- Patient stroke symptoms (be very clear)
- Last known well time
- Patients name, age
- Additional details that Ambulance dispatch requires

Time Sensitive Stroke Treatment



IV Thrombolytic
*must be administered within 4.5 hours from last known well



Endovascular Thrombectomy
*Can be performed 0-6 hours from a last known well and a late window for selected patients 0-24 hours



Stroke Month Collaboration

Collaboration with Rehab Hospital

Lunch n' Learns
30 Minutes Max

Stroke Lunch n' Learn

Stroke Sign Awareness and Assessments

Presenters Kristina Moro
Clinical Nurse Specialist, NWORSN
Tara Lewis
Rehabilitation Specialist, NWORSN

Date Thursday, June 20th

Time 1200-1300

In Person Room-B010: Meeting Room 3

All Staff Welcomed!

Lunch Provided

Please email tanis.banovsky@tbh.net to confirm attendance

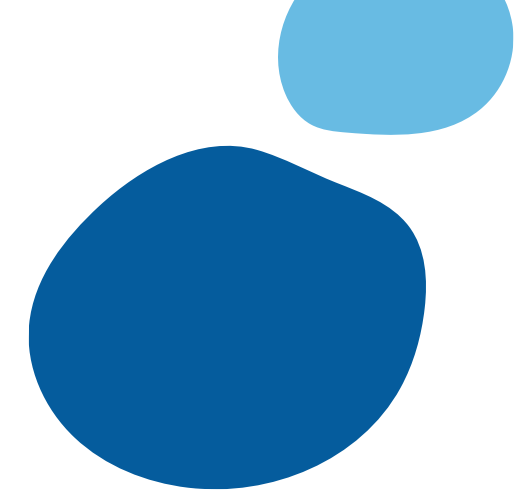
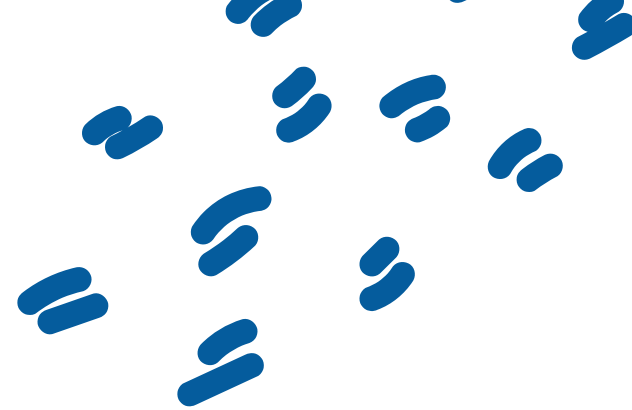


Stroke Month Collaboration

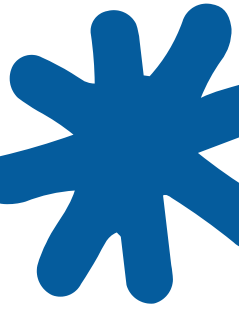
Collaboration with Rehab Hospital

173 Staff

REFS



REFS: Roaming Education For Staff



REFS: Roaming Education For Staff

- Collaboration with TBRHSC
- Lunch n Learns
- Roaming Education
- Simulation
- Online Trivia
- Relevant Messaging

REFS: Roaming Education For Staff



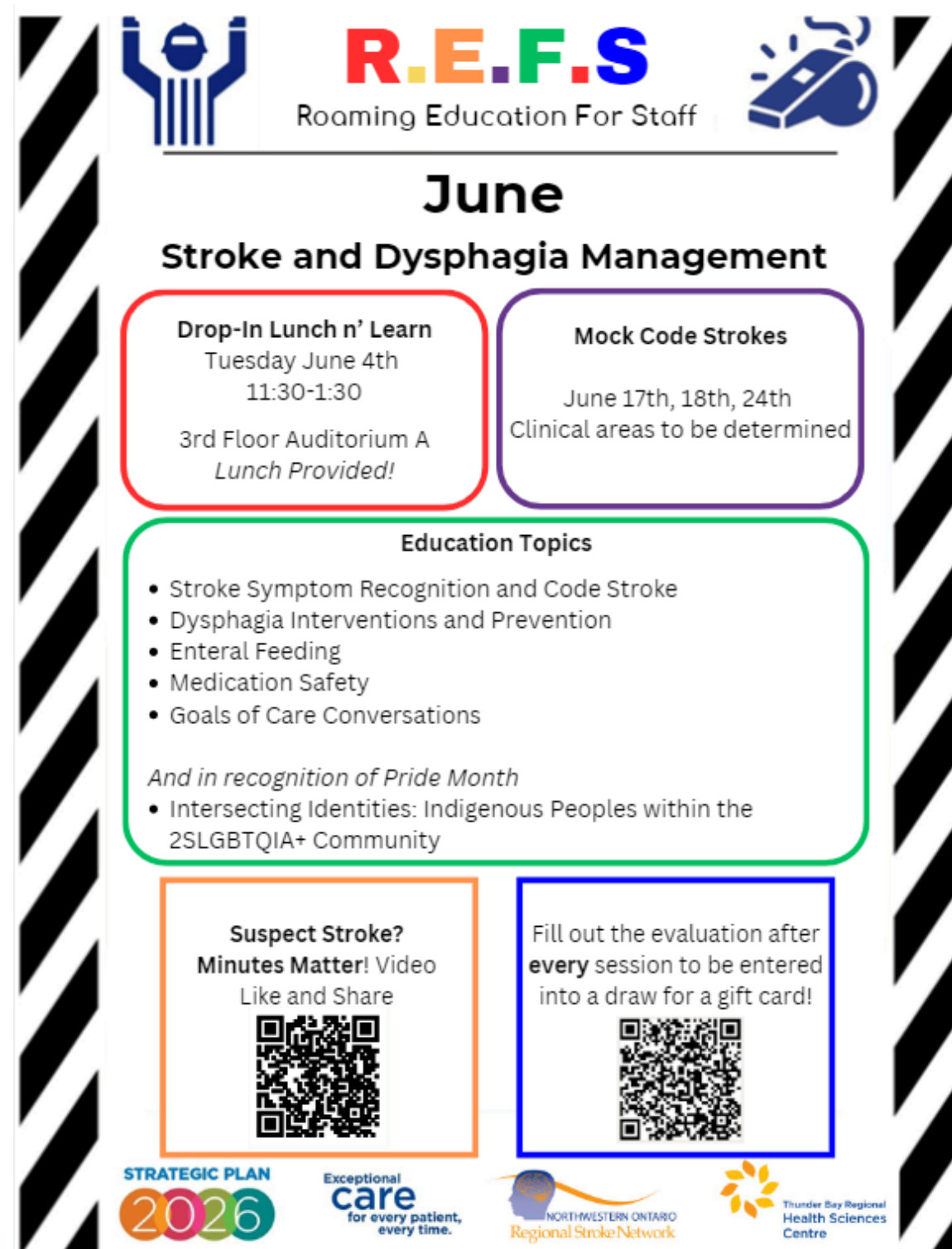
June
Stroke Month
TBRHSC Staff and learners

REFS: Roaming Education For Staff

- Code Stroke Calling Criteria
- Safe Swallowing
- Recognize **FAST**
- Treatment

Additional Topics:

- Mouth Care
- Enteral Nutrition



The poster is titled "REFS: Roaming Education For Staff" and is for the month of June. It features a central theme of "Stroke and Dysphagia Management". The poster is decorated with a black and white striped border. At the top, there are icons of a person with arms raised and a mobile phone. The main content is organized into several sections: a "Drop-In Lunch n' Learn" event on Tuesday, June 4th, from 11:30-1:30 in the 3rd Floor Auditorium A, with lunch provided; "Mock Code Strokes" on June 17th, 18th, and 24th in clinical areas to be determined; a list of "Education Topics" including Stroke Symptom Recognition and Code Stroke, Dysphagia Interventions and Prevention, Enteral Feeding, Medication Safety, and Goals of Care Conversations; a note about Pride Month with a topic on "Intersecting Identities: Indigenous Peoples within the 2SLGBTQIA+ Community"; and two QR codes for a "Suspect Stroke? Minutes Matter! Video" and for an evaluation form that can win a gift card. At the bottom, there are logos for the Strategic Plan 2026, Exceptional Care for every patient every time, the Northwestern Ontario Regional Stroke Network, and the Thunder Bay Regional Health Sciences Centre.

REFS
Roaming Education For Staff

June
Stroke and Dysphagia Management

Drop-In Lunch n' Learn
Tuesday June 4th
11:30-1:30
3rd Floor Auditorium A
Lunch Provided!

Mock Code Strokes
June 17th, 18th, 24th
Clinical areas to be determined

Education Topics

- Stroke Symptom Recognition and Code Stroke
- Dysphagia Interventions and Prevention
- Enteral Feeding
- Medication Safety
- Goals of Care Conversations

And in recognition of Pride Month

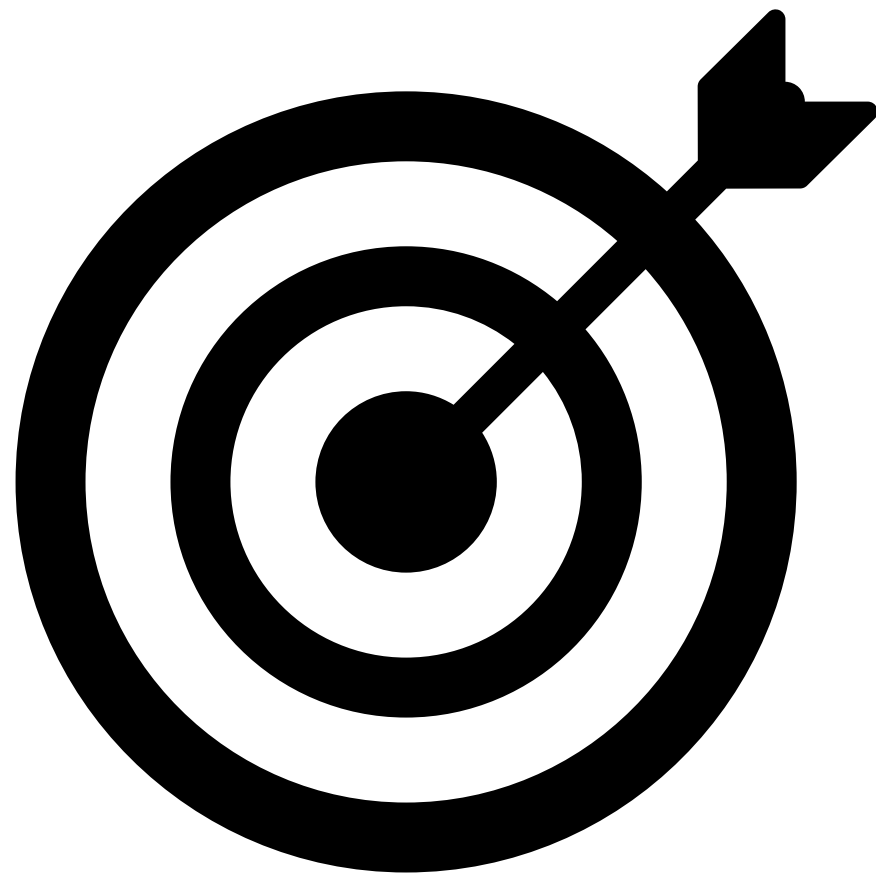
- Intersecting Identities: Indigenous Peoples within the 2SLGBTQIA+ Community

Suspect Stroke? Minutes Matter! Video
Like and Share

Fill out the evaluation after **every** session to be entered into a draw for a gift card!

STRATEGIC PLAN 2026
Exceptional care for every patient, every time.
NORTHWESTERN ONTARIO Regional Stroke Network
Thunder Bay Regional Health Sciences Centre

REFS: Roaming Education For Staff *

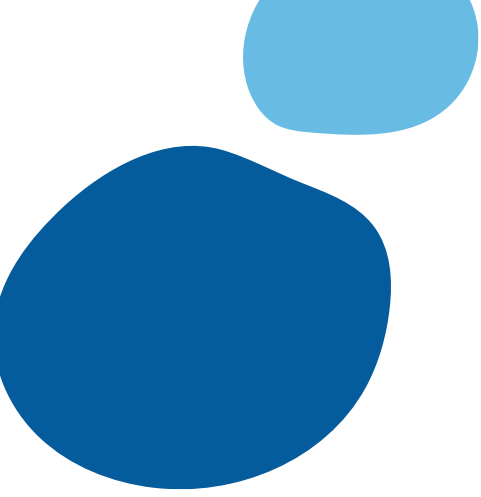


Renal Department
80 nurses
15% turnover

Roamed x2 weeks
Mock Code Stroke
Follow up email

REFS: Roaming Education For Staff *

510 Staff



Regional Education Tour



Canadian Stroke Best Practices



1. Stroke Awareness, Recognition, and Response

2022 update



Recommendations

- i. Organized and integrated stroke systems of care should be established and sustained in every health region in Canada to enable rapid emergency stroke management, including a public awareness campaign, public emergency system (such as 9-1-1), and monitoring systems that consider equity, age, sex, and gender diverse populations [Strong recommendation; Moderate quality of evidence].
- ii. All members of the public and all healthcare providers should be educated that stroke is a medical emergency [Strong recommendation; Low quality of evidence].
 - a. Education for the public and healthcare providers should include information that stroke can affect persons of any age including newborns, children, and adults. [Strong recommendation; Low quality of evidence].
 - b. Education for the public and healthcare providers should emphasize the benefits of early emergency treatment [Strong recommendation; Moderate quality of evidence].
- iii. Awareness campaigns and education for the public and healthcare providers should emphasize recognition of the signs and symptoms of stroke, including the use of an acronym such as FAST (Face, Arms, Speech, Time) to facilitate awareness of and easy recall of these signs [Strong recommendation; Moderate quality of evidence]. *Refer to Box 1A for additional information.*
 - a. The public and healthcare providers should **respond immediately** when witnessing someone experiencing signs or symptoms of stroke by calling 9-1-1 or their local emergency number [Strong recommendation; Moderate quality of evidence], even if the signs or symptoms resolve. *Refer to Box 1B for additional information.*

Regional Stroke Tour

4 consecutive years



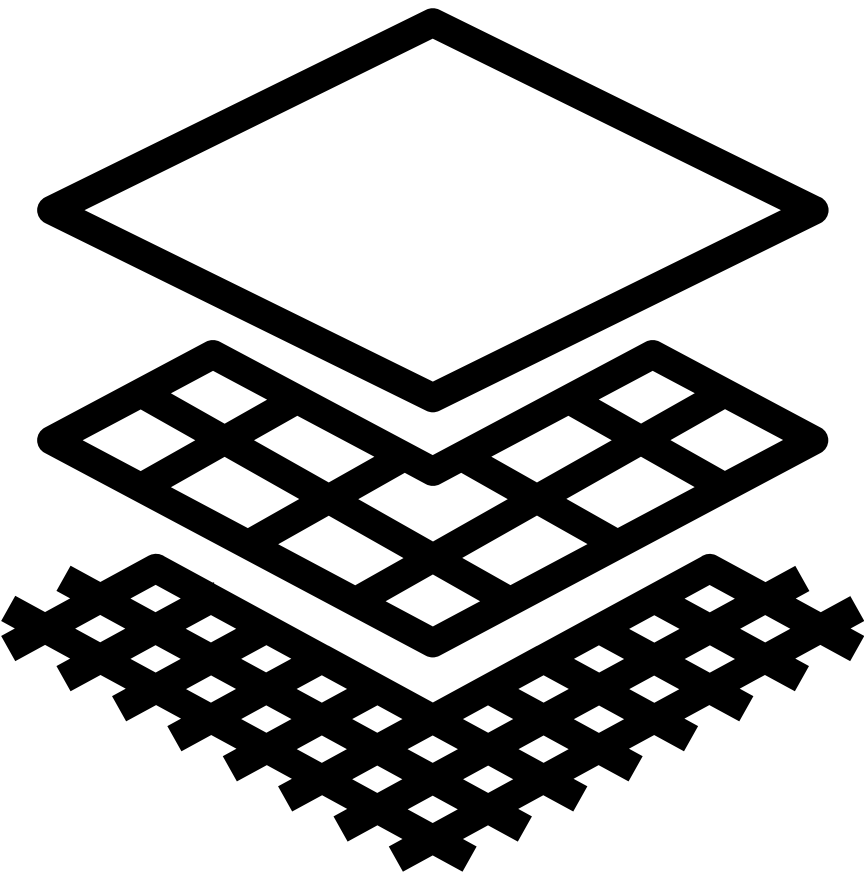
Acute Hospital Focus

Year 1: FAST and Pathways

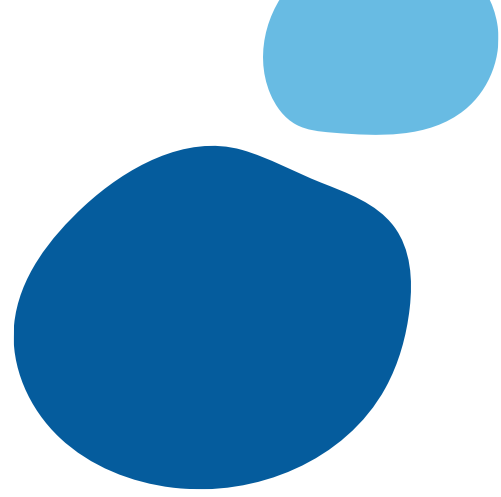
Year 2: ACT-FAST and custom algorithms

Year 3: Stroke Pathways and NWO Navigate

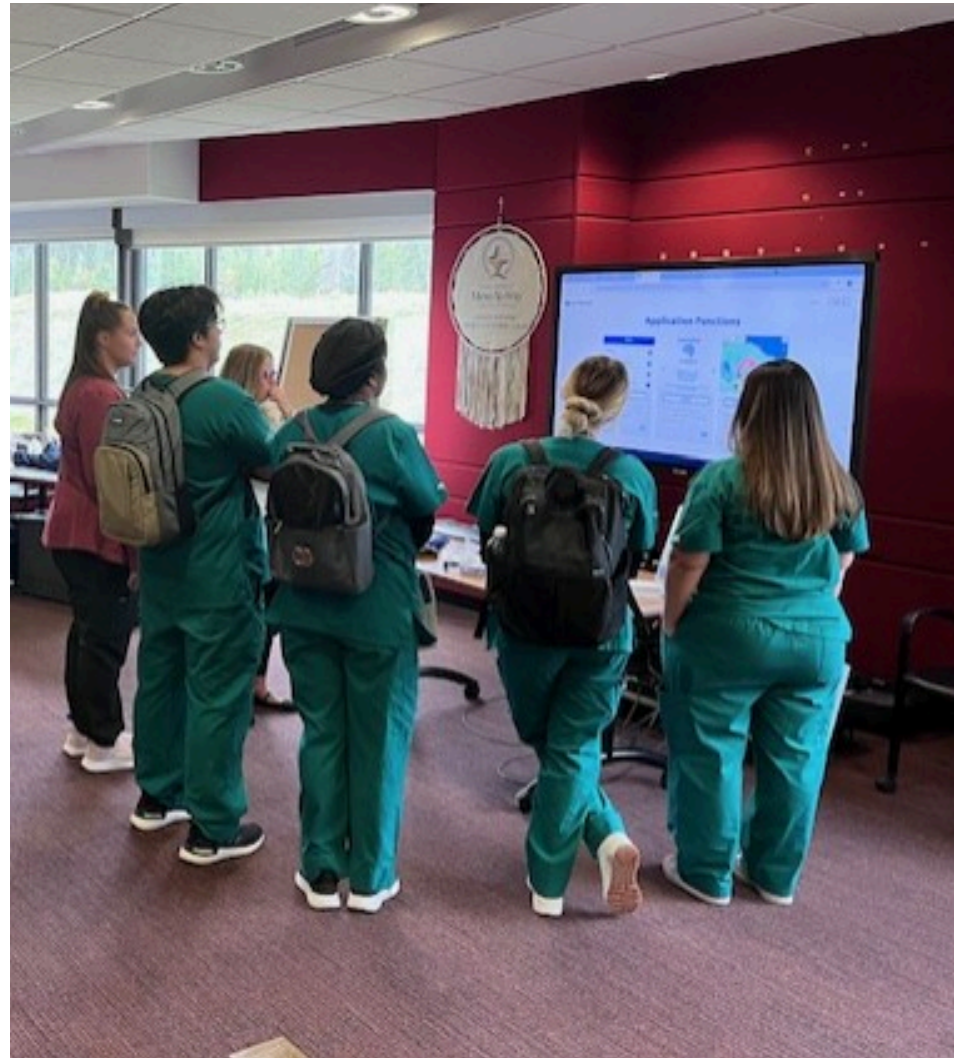
Year 4: Posterior Circulation Stroke and Treatment



Regional Stroke Tour



Primary Health Care
& EMS/CP Leadership



Hospital

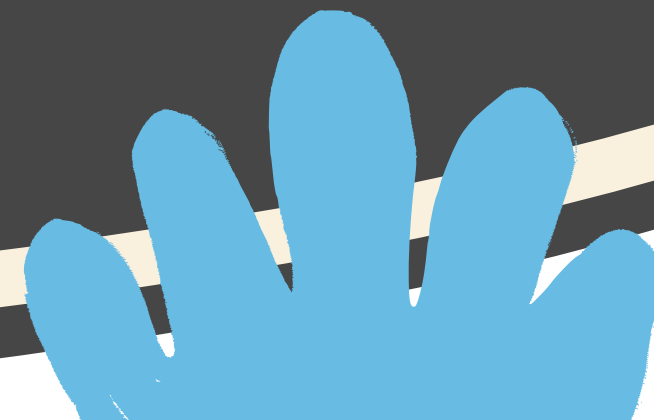


Public



Regional Stroke Tour

In-person education
Unique needs of individual community
Drop-in style
Mixed strategies for each session
Focusing on the entire community



Regional Stroke Tour

Hands on

Stroke Imaging Visuals

Stroke Treatment Demo

FAST Videos

QR Codes Cards

Individualized Education Plan

Time Sensitive Education



1:1 Demo

- Neuro Assessment
- Collars & Braces
- Posterior Circulation Stroke
- Stroke Screening Tools

Scan & View

- Adult Neurological Assessment
- Glasgow Coma Scale Assessment
- What is EVT
- NWO Navigate
- Stroke Awareness

Match

- ICP
- Neuro Case Study
- FAST
- ACT-FAST
- Stroke Case Study

Complete form to win prizes

Name: _____
Email: _____

Regional Stroke Tour

Relevant to Practice
Relevant to Community

Stroke
Awareness
Initiatives

Posterior Circulation Stroke

Custom Algorithms

Posterior Circulation Stroke

- Approximately 20% all strokes
- Vague/atypical presentations
- The screening tool **FAST** has the potential to overlook posterior circulation strokes (PCS) symptoms
- PCS may not be recognized as stroke symptoms on initial assessment for patients who arrive to the ED via EMS or self-transport
- PCS can receive time stroke sensitive treatment



5 D's Assessment

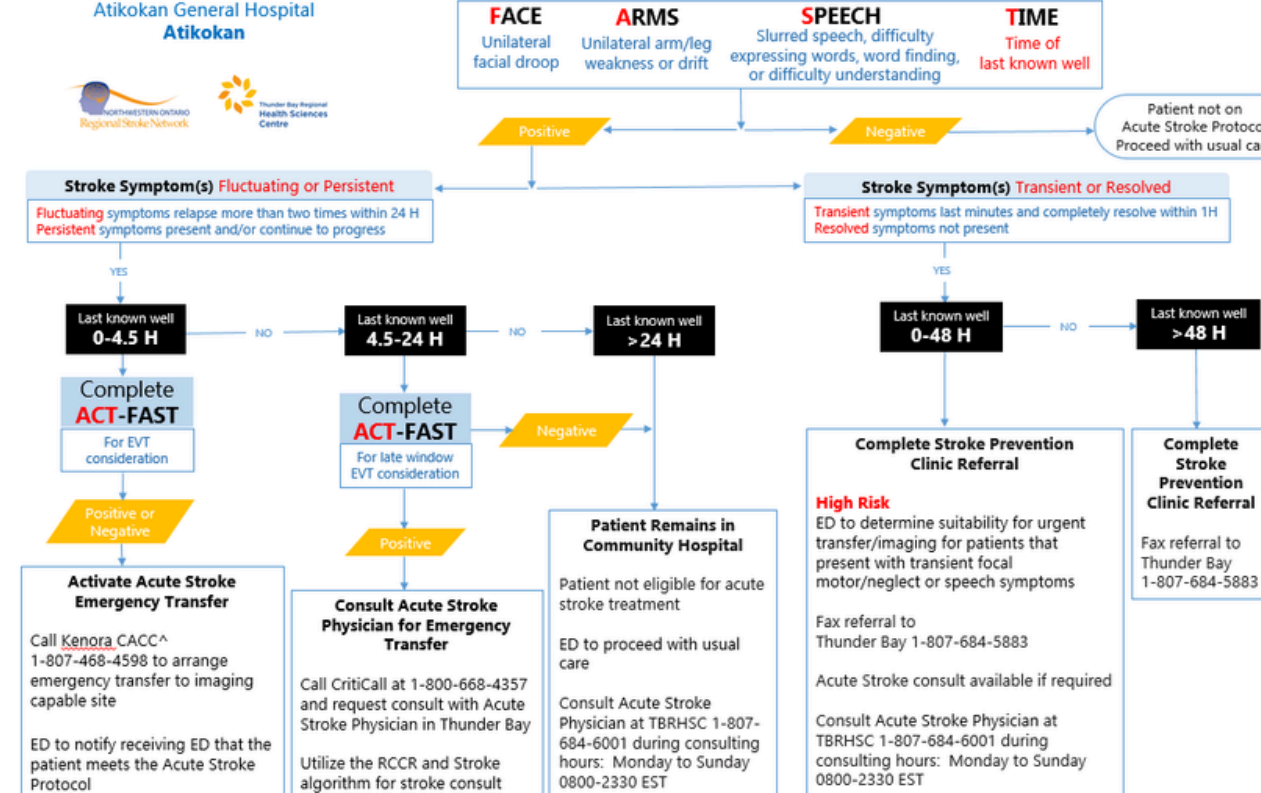
Symptom	Definition	Clinical Presentation
Dizziness	<ul style="list-style-type: none"> Vertigo Disequilibrium Light-headedness Pre-syncope 	<ul style="list-style-type: none"> 3Ts: Timing, Triggers and Type Dizziness is the number one complaint with an associated symptom
Diplopia	<ul style="list-style-type: none"> Double vision Nystagmus 	<ul style="list-style-type: none"> Blurry vision Repetitive eye movements Uncontrolled eye movements
Dysarthria	<ul style="list-style-type: none"> Difficulty speaking due to muscular weakness 	<ul style="list-style-type: none"> Difficulty moving mouth, tongue or lips Slurred or slowed speech Difficulty controlling the volume of their voice
Dysphagia	<ul style="list-style-type: none"> Difficulty swallowing 	<ul style="list-style-type: none"> Complaints of choking on food or liquid that is new or worsened
Dystaxia	<ul style="list-style-type: none"> Impaired coordination or balance Poor muscle control 	<ul style="list-style-type: none"> Staggering, broad based gait Impaired coordination of fine motor movement – jerky movement Impaired balance



Source: American Heart Association, www.heart.org v0.1 Sept 2024
www.nwestroke.ca | nwostroke@tbh.net



Acute Stroke Protocol Emergency Department Algorithm Atikokan General Hospital Atikokan



Supporting Information

- Time Zones:** EST and CST are the two time zones in the Northwestern Ontario region
- Pediatric Patients:** For pediatric patients 0-17y with acute onset of possible stroke, call Critical Ontario 1-800-668-4357
- Endovascular Treatment (EVT):** For EVT consideration, Winnipeg Health Sciences Centre is referral 1 site, if TBRHSC is unavailable
- Acronyms:** TBRHSC: Thunder Bay Regional Health Sciences Centre; ED: Emergency Department
- CACCA:** Central Ambulance Communication Centers will determine if the coordination of transportation, including symptom duration and anticipated transportation time can be made to imaging sites within 6 hours
- Canadian Stroke Best Practice Recommendations:** Secondary Prevention of Stroke, 7th Edition, Update 2020; Acute Stroke Management, 6th Edition, Update 2018

Version 0.1 Sept 2022

WE NEED YOUR HELP

Educating the public about **STROKE AWARENESS** is crucial for saving lives

Let's promote these three key initiatives together

Your support can make a difference!

1 GET HELP FASTER IN AN EMERGENCY!

WHAT3 WORDS

When it's hard to describe where you are in the North, you only need to read out three words for ambulance to know exactly where to find you.

Download the App Today!

2 CHILDREN SAVING GRANDPARENTS!

FAST!

FAST Heroes: Global award winning FREE children's health education program delivered in schools by the Grade 1, 2 & 3 teachers for 1 hour per week over 5 weeks.

Email: Canada@fastheroes.org

3 SUSPECT STROKE? MINUTES MATTER!

Most NWO residents drive to the hospital instead of calling 911 during a stroke emergency! Watch our split screen video to see how and why every second counts.

Share to spread the word!

Regional Stroke Tour


4,228 km / 13 days

17 Communities

12 Hospitals

10 Primary Care Centres

3 EMS Services

Staff 
Engagement



4,206 km
Toronto to
Vancouver Island

Hospital: 195

Primary Care: 49

EMS: 10

Public: 103

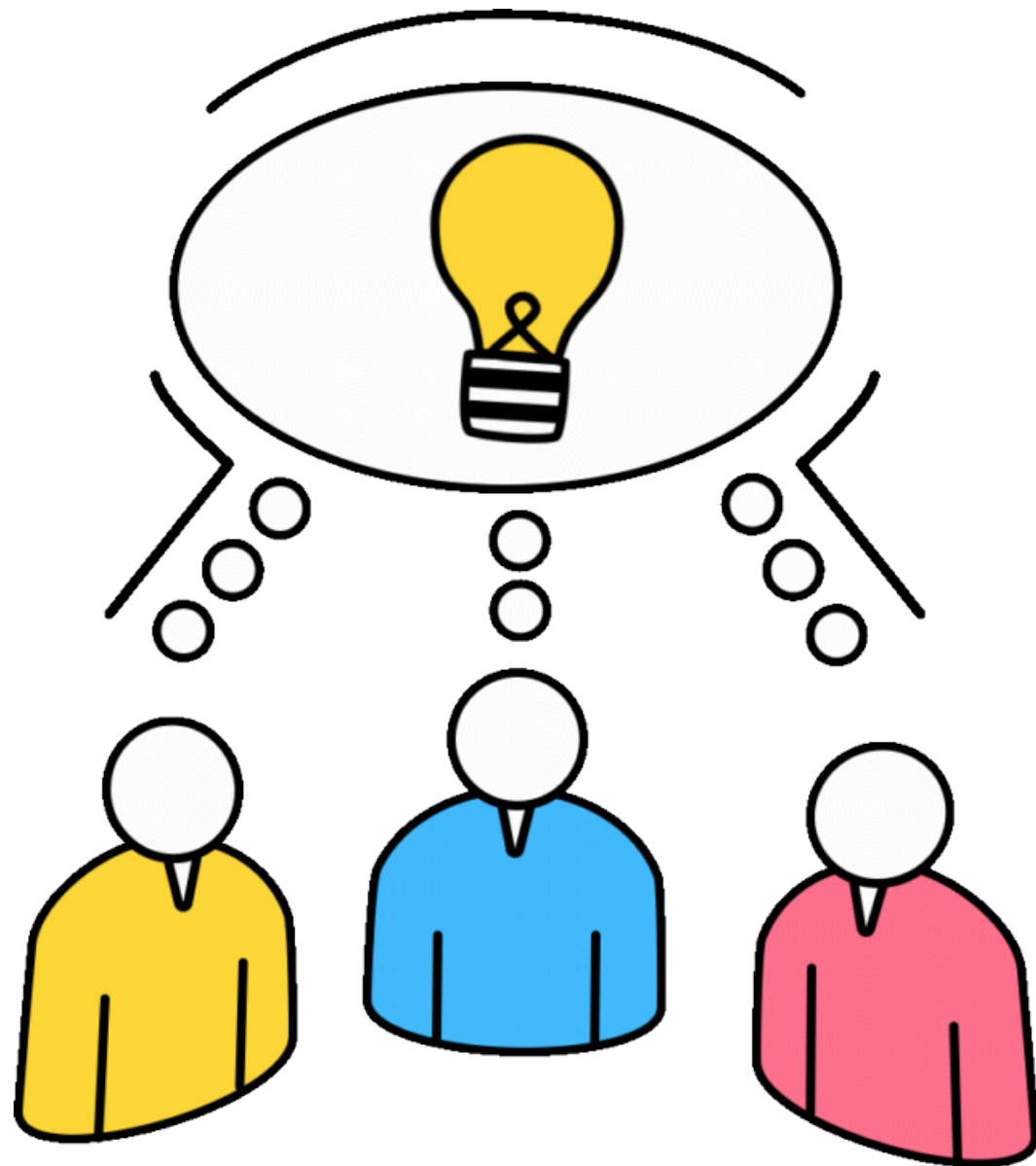


Regional Stroke Tour



254 Staff
103 Public

Regional Stroke Tour


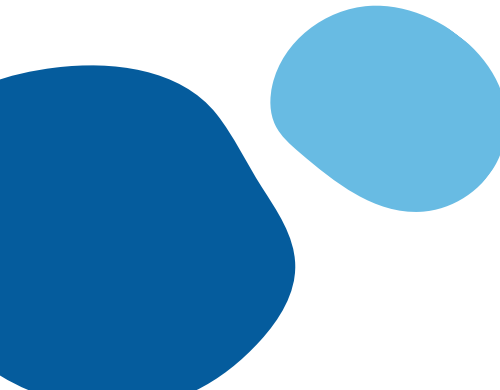
The Benefit of In-Person Education



In the Moment Education
Ability to Tailor Education (CNSS)
Meet with Staff Working
Ensure Current Resources



When was the most recent
educational session that
you felt enthusiastic
about teaching?



Key Take Aways

Collaboration is Key

Blend Care Continuum

Fast Messaging

Relevance to Practice

Stay Innovative



Questions?



Evaluation

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- For quality assurance and improvement
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