

# Stroke Network of SEO

Vision:

*Fewer strokes. Better outcomes.*

Mission:

*to continuously improve stroke prevention, care, recovery and reintegration.*

**Regional Stroke Symposium June 2023**

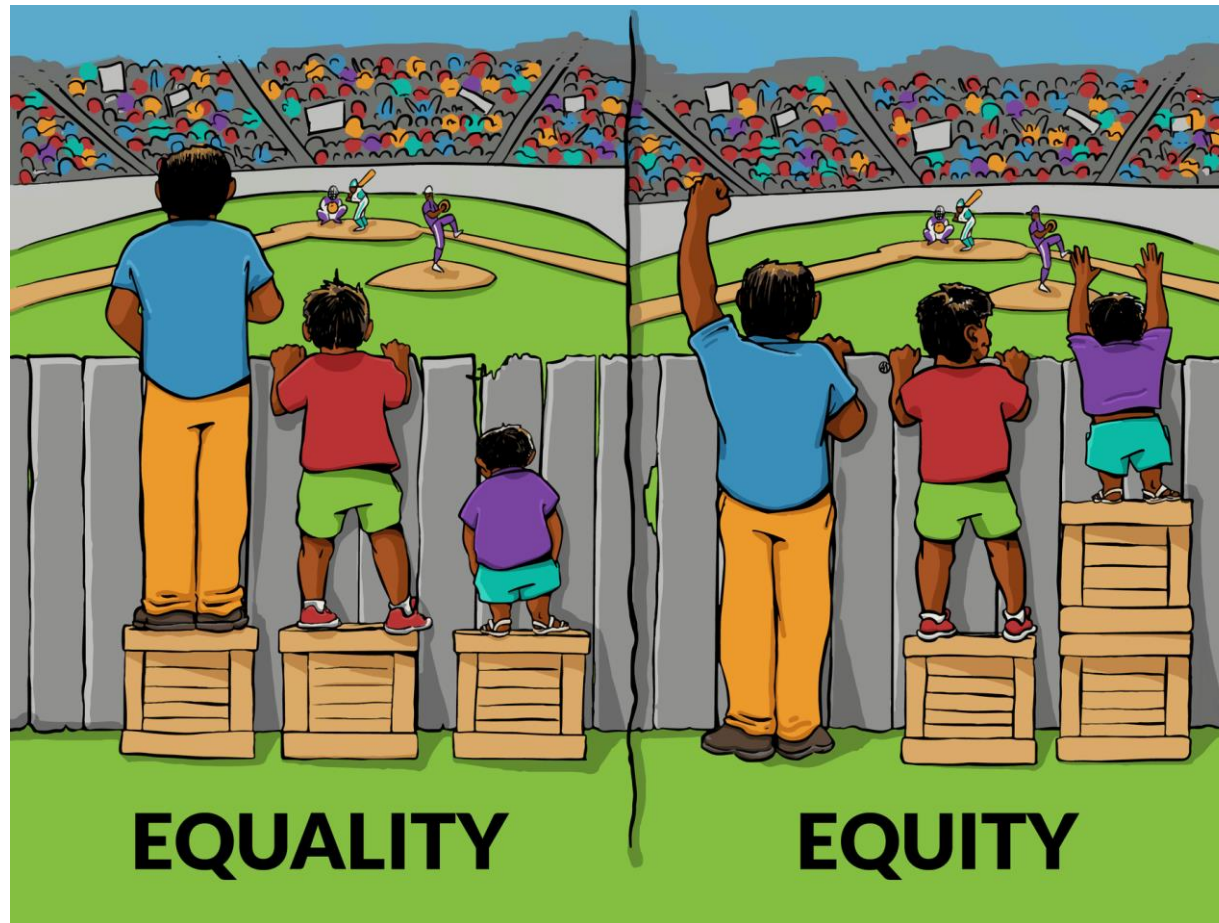
**Equity, Innovation and  
Excellence in Stroke Care**

[www.strokenetworkseo.ca](http://www.strokenetworkseo.ca)



# Equity, Innovation, Excellence

## What images come to mind?



# Equity, Innovation, Excellence

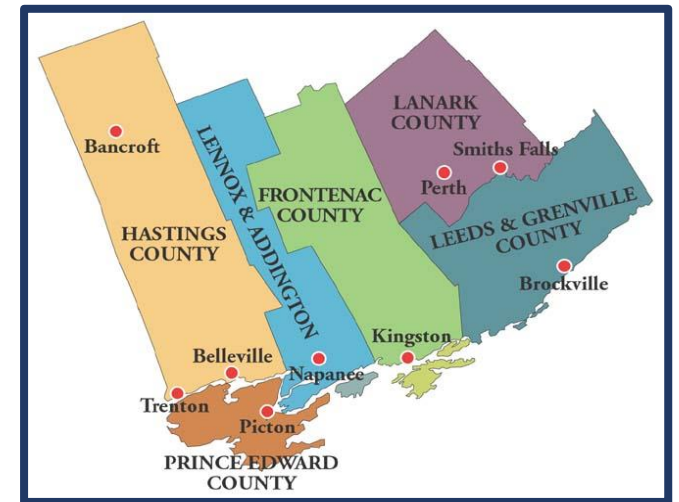
## What images come to mind?





# Equity & Numbers: Profile of our Region

- SE is amongst regions with highest stroke admission rates in ON (2022 Ontario Stroke Report Stroke/TIA admission rate per 1,000 population)
  - **SE 1.8** vs ON 1.5
- High rural residency - **SE 45%** vs ON 14%
- High rates of vascular risk factors across SE (Stats Canada 2019-20)
  - Obesity - **SE 32-36%** vs ON 28%
  - Hypertension - **SE 20-21%** vs ON 17.5%
  - Smoking - **SE 10-16%** vs ON 9%
- High material deprivation index → social determinants of health
- OH-East projects ↑ in % residents > 65 yo in next 10 yrs (from 20% to 37%)



# Equity & Numbers

## Indigenous Populations

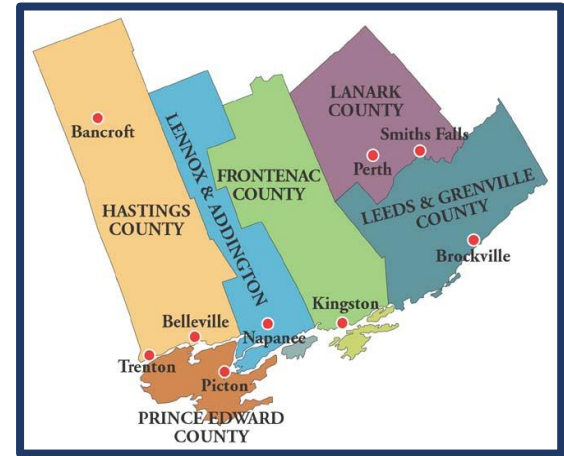
- Indigenous populations sustain up to 2x rate of stroke, heart disease and chronic kidney disease than non-indigenous populations
- Higher rates of vascular conditions among young Indigenous people
- Hospitalizations are higher amongst Indigenous populations

## ON Rural vs Urban Differences (Circ Cardiovasc Qual Outcomes, 2019 Kapral et al)

- Risk factors more prevalent and less likely to be controlled in rural vs urban residents
- Rural residence associated with increased rate of stroke and death even after adjustment for risk factors

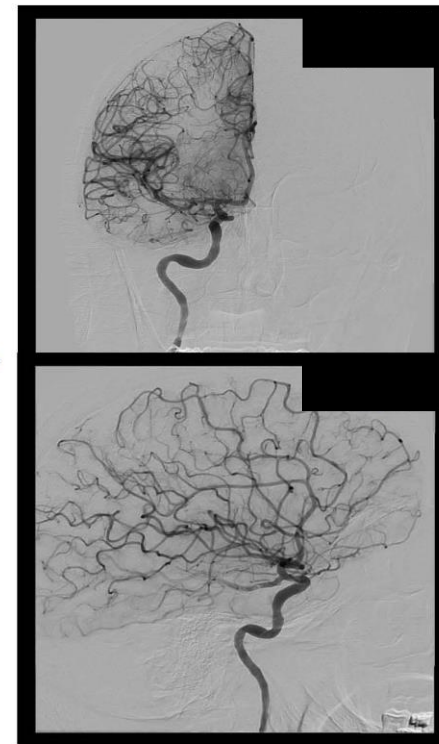
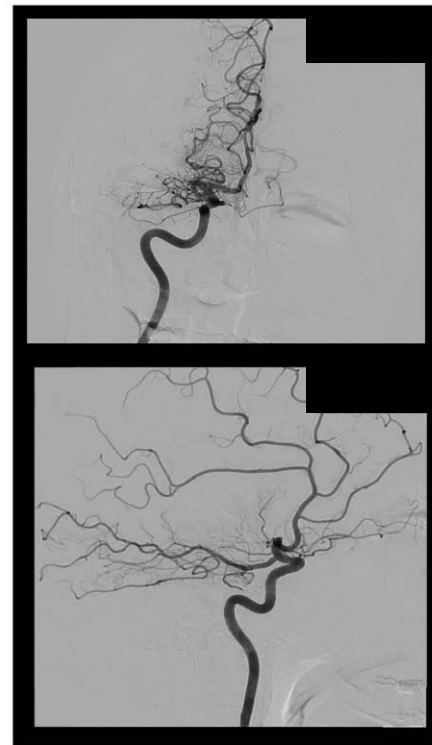
## Women: Heart and Stroke (2023 Report “System Failure” )

- Women who experience stroke are at higher risk of dying than men and if they survive, their outcomes are worse
- Heart and Stroke = #1 cause of premature death in women in Canada
  - *What we don't know is hurting women*



# Equity, Innovation, Excellence

What images come to mind?



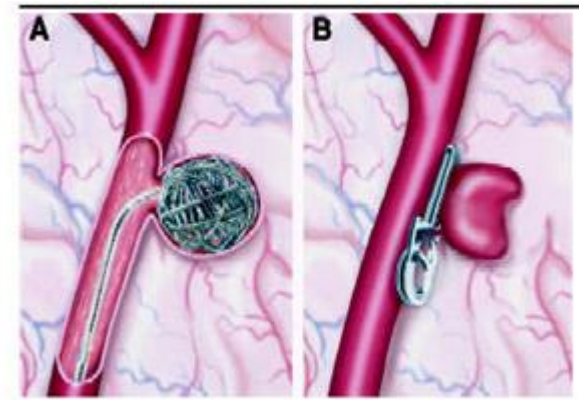
# Equity, Innovation, Excellence

## What images come to mind?



Endovascular Cerebral Aneurysm  
Coiling in the SE

Same day admission and discharge  
for elective coiling



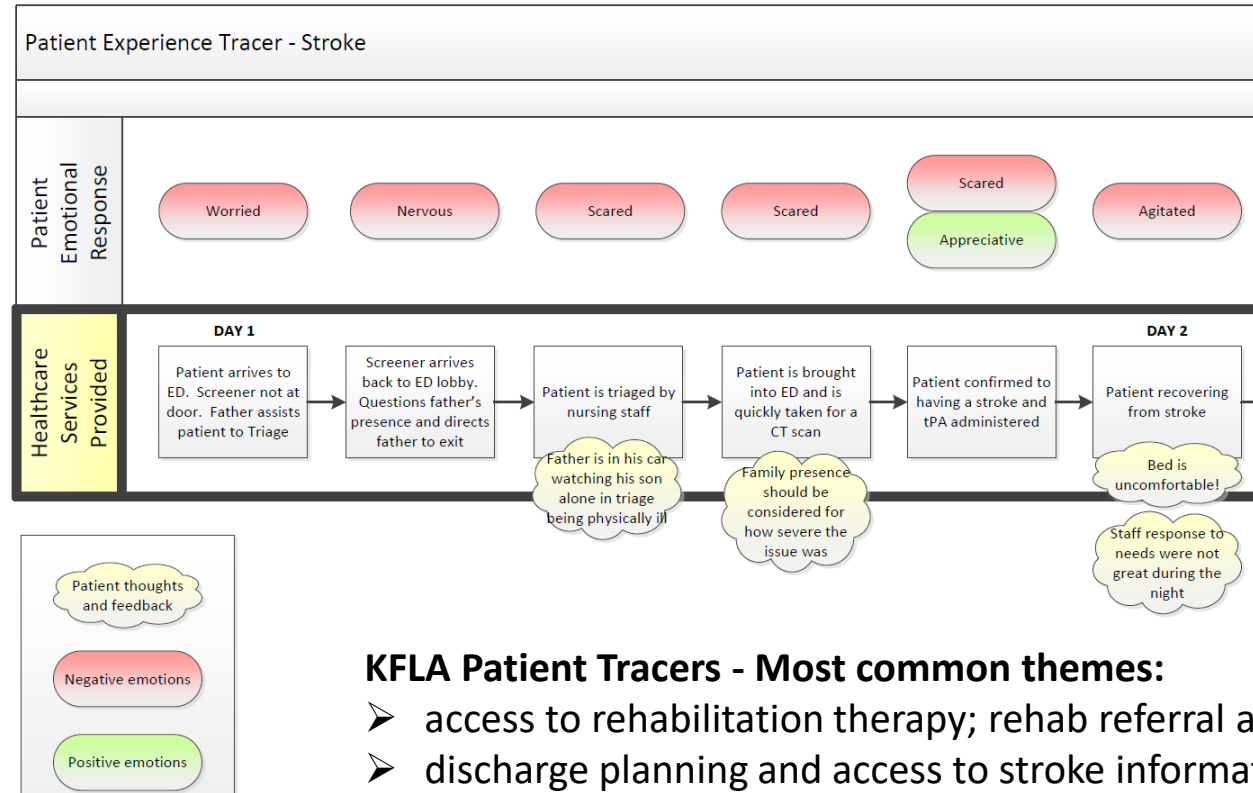
Coiling

Clipping



# Equity, Innovation, Excellence

## What images come to mind?



### KFLA Patient Tracers - Most common themes:

- access to rehabilitation therapy; rehab referral and transition
- discharge planning and access to stroke information
- eating and dietary restrictions
- confidence in stroke team expertise
- meal taste and quality
- staff availability in care delivery

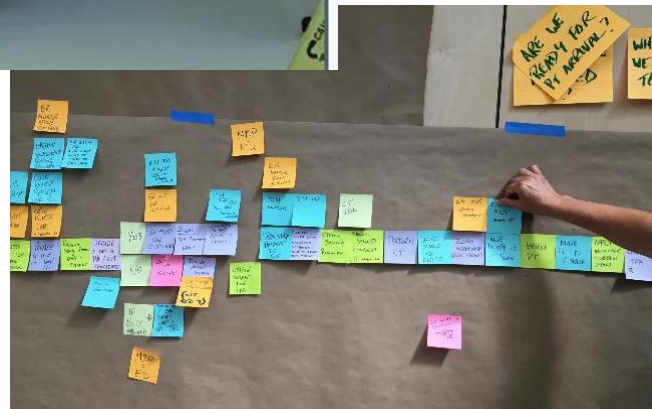


# Equity, Innovation, Excellence

## What images come to mind?



HYPERACUTE protocols  
Highest access and  
lowest door-to-needle  
times in the province



STROKE UNIT CARE  
Integrated Stroke units  
in Belleville and  
Brockville, working as  
one team in Kingston



strokenetwork  
SOUTHEASTERN ONTARIO

# KHSC-PCH Joint Pursuit of Excellence

## QI Project: FAST-Track referral to Rehabilitation

Process mapping  
Identified redundancy  
New process by frontline teams  
Rapid Tests of Change Approach

Reduced Stroke Onset to Rehab Admission  
from **18 days** in 2019 to **9 days** in Q1 and Q2 of 22/23  
Now working to sustain!!



# Stroke Care in South East 2020/21



NOTE: Arrow indicates how SE is trending from last FY report – improvement indicated by upward green arrow; worsening by downward red arrow

## STROKE IS A MEDICAL EMERGENCY



**68.6% ↑** (ON 66.2%)

of stroke/TIA patients arrived at the emergency department by ambulance

**84.0% ↑** (ON 81.4%) of patients were referred to secondary prevention services after discharge from the emergency department\*

## TIME IS BRAIN



**19.9% ↑** (ON 14.1%)

of ischemic stroke patients received hyperacute therapy

**14.8%** tPA (tissue plasminogen activator) (Target: >12%) (ON 10.5%)

**31 minutes** median door-to-needle time (Target: <30 minutes) (ON 44.0)

**6.9%** EVT (Endovascular therapy) (ON 5.8%)

## STROKE UNIT CARE IMPROVES OUTCOMES



**1.81 ↑** per 1000 population (ON 1.46)

are admitted for acute stroke/TIA

**41** hospitals in Ontario have a stroke unit

**79.1% ↑** (ON 56.1%) of stroke patients treated on a stroke unit (Target: >75%)

## SECONDARY PREVENTION OF STROKE OCCURS ACROSS THE CARE CONTINUUM



**9 days \*\* ↑** (ON 8.0)

Median time from acute admission to inpatient rehabilitation

## REHABILITATION OPTIMIZES RECOVERY



**26.2%\*\* ↑** (ON 31.4%)

of patients accessed inpatient rehabilitation

**75 minutes** per day of inpatient therapy was received per patient (Target: 180 minutes) (ON 68.9%)

## STROKE JOURNEY CONTINUES AFTER DISCHARGE



**57.2 days \*\* ↑** (ON 56.4)

Average number of days spent at home in the first 90 days after stroke

**66.4%\*\*** received home-based rehabilitation\* (ON 38.6%)

**12\*\*** median number of visits (ON 9.0)

**76.6% ↑** (ON 74.9%) of patients aged 65 and older with atrial fibrillation filled a prescription for anticoagulant therapy within 90 days of acute care discharge\*

## PATIENT OUTCOMES – SE rates each similar or improved from last FY

**6.2%** of stroke/TIA patients were readmitted within 30 days (ON 6.6%)

**11.3%** of stroke/TIA patients died within 30 days (ON 12.1%)

**8.2%\*\*** of stroke patients were admitted to long-term care within 1-year post discharge (ON 6.3%)

\*There is currently no data available for outpatient rehabilitation and secondary prevention clinic.

\*\* 2020/21 Q2 (YTD)





# Excellence recognized nationally

## Accreditation Canada Stroke Distinction Award

Kingston Health Sciences Centre – Acute Services 2012 to 2023

Quinte Health – Acute and Rehab Services - 2023



# Equity, Innovation, Excellence

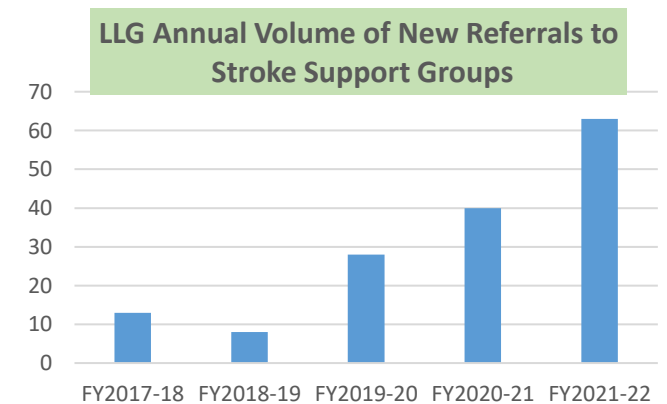
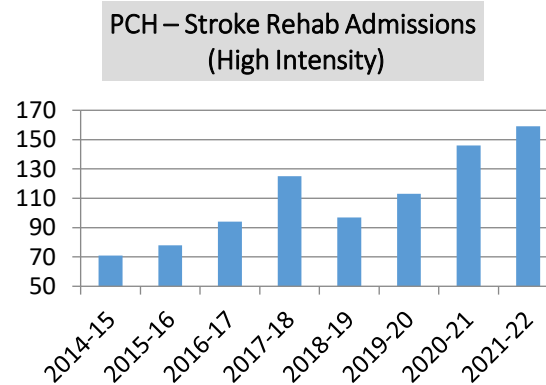
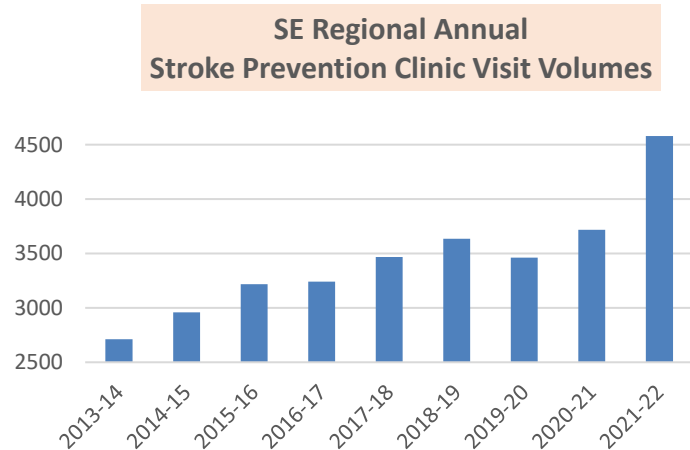
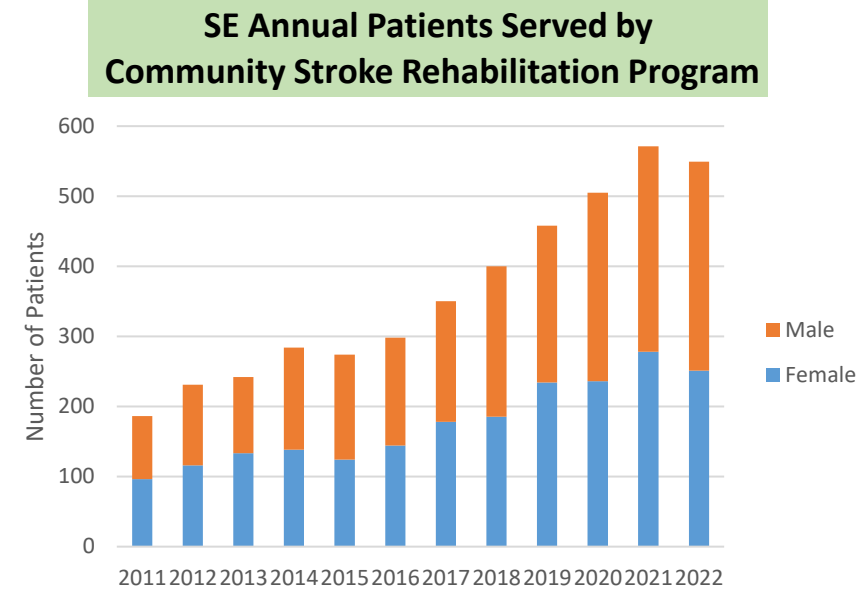
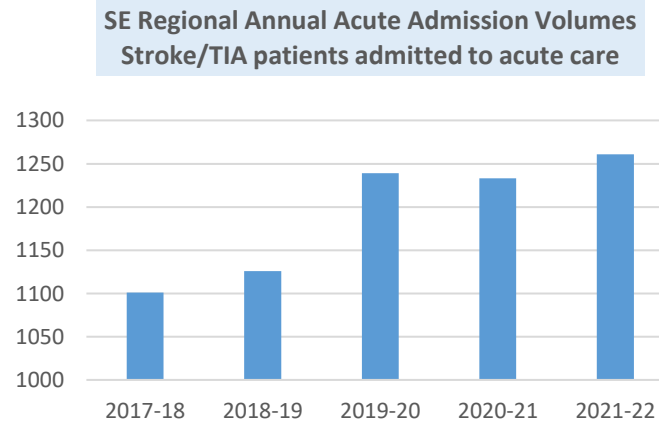
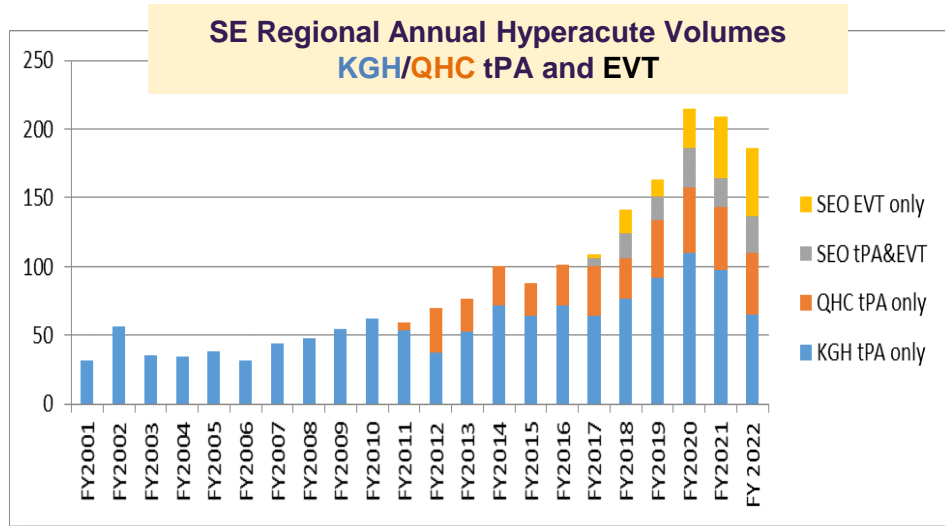
## What images come to mind?

YOU!!



# Sustaining Excellence requires Innovation

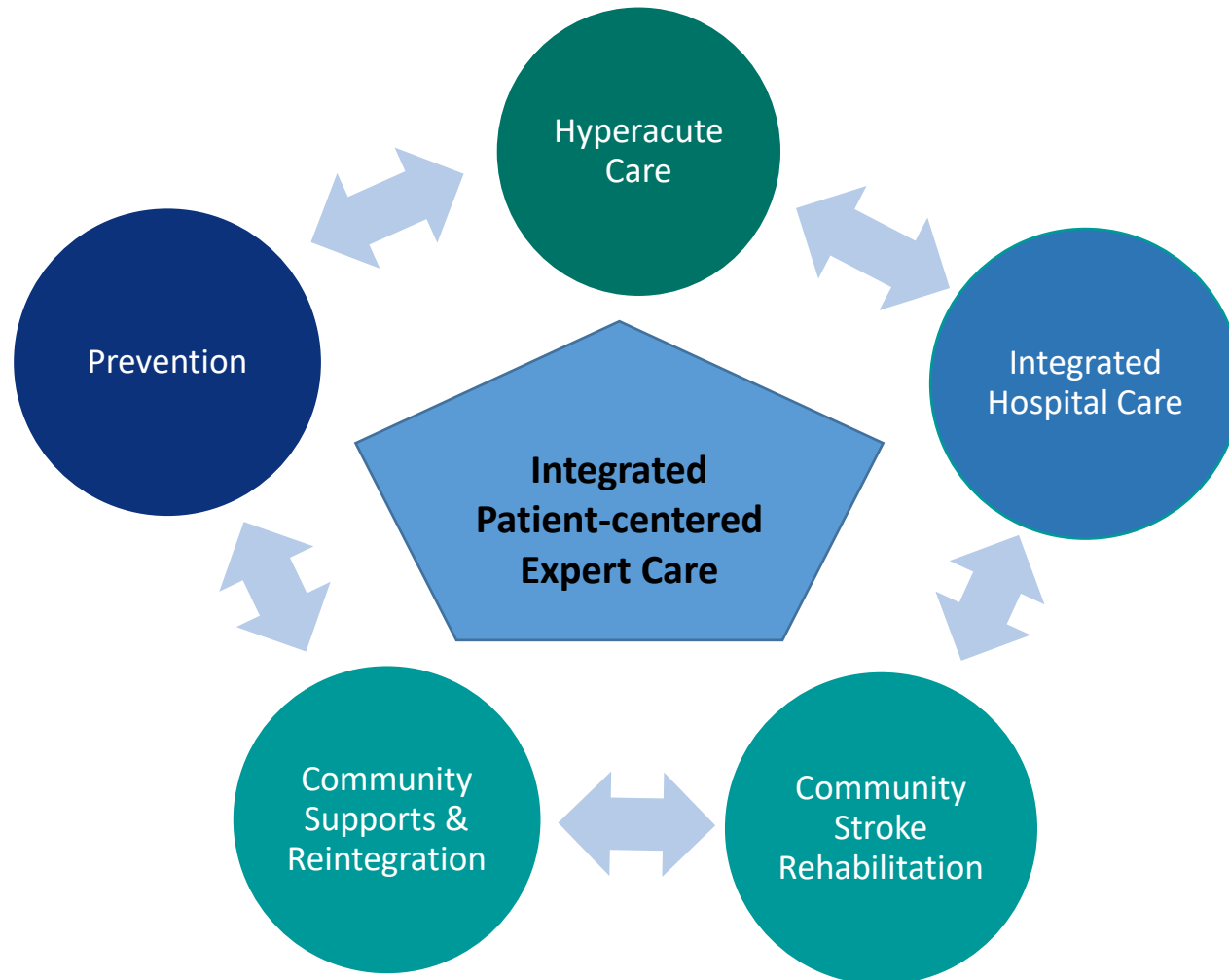
## What's next?





# 2023-25 Regional Workplan

[www.strokenetworkseo.ca](http://www.strokenetworkseo.ca)



Timely Access  
Organized Pathways  
Quality Expert Care  
Patient Experience  
Optimal Recovery  
Community Reintegration  
Evaluation  
Continuous Improvement  
Best Practice

# Thank you for continuously improving care outcomes!!



Together, as ONE Team.  
Every person matters!

[www.strokenetworkseo.ca](http://www.strokenetworkseo.ca)

[www.strokebestpractices.ca](http://www.strokebestpractices.ca)

