STROKE NETWORK of Southeastern Ontario

Leveraging rehabilitation to improve stroke patient flow and quality outcomes

Preparing for Quality Based Procedures for Stroke Care

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Overview

- Rehabilitation across the continuum of care – Current state
- Canadian Best Practice Recommendations 2012-13
- The evidence
- The urgent platform: patient flow
- Introduction to Quality Based Procedures for stroke care
- What we are doing in Southeastern Ontario
  - Acute Care
  - Rehabilitation
  - Community
- Where do we go from here?
- Future state: What will it look like?

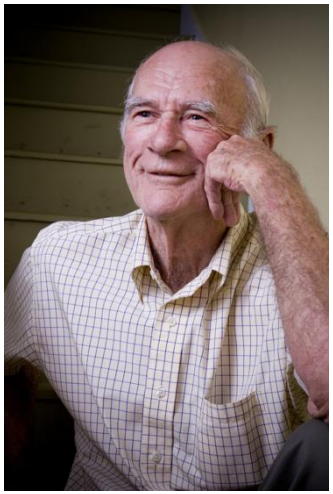
Current State

"Flo" – a person with Severe Stroke

- 87 yo woman, lives alone
- Admitted to General Medicine Unit
  - Develops UTI and pneumonia
  - Awaits another level of care (ALC) 4 mos, limited rehab, develops depression
- Transferred to Long Term Care, limited rehab

- Could the outcome have been better?

Current State



"Mike" – a person with Mild Stroke

- 60 yo man lives with family
  - Some communication deficits, mild motor & cognitive issues
- Admitted to Acute care for 13 days
- Admitted to Inpatient Rehab
  - Stays 3 weeks (no outpatient rehab available)
- Discharged home

- Could the process have been better?

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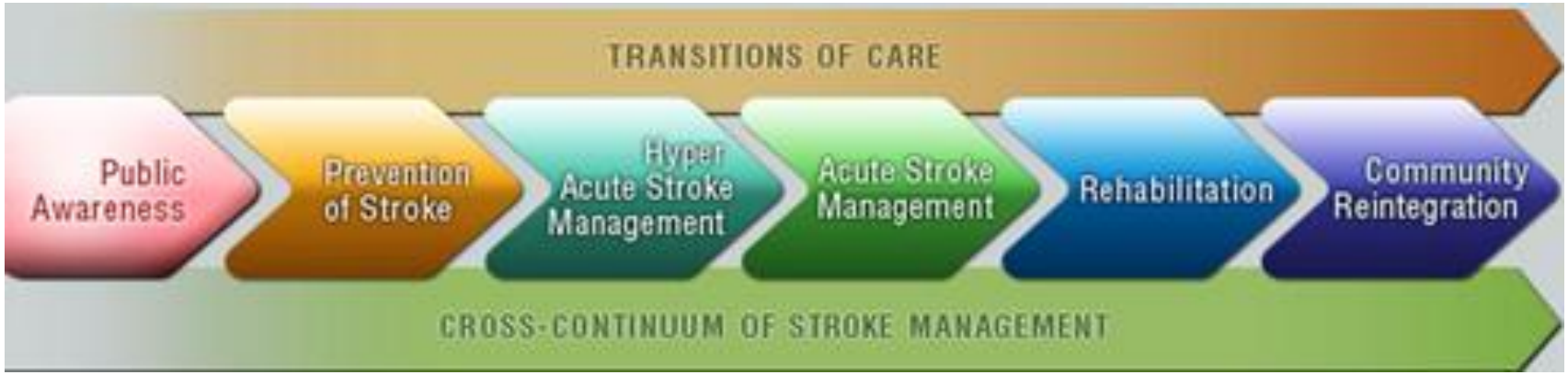
IMAGINE this!!!

- Access to expert evidence-based care
  - in the right place at the right time
- Positive patient journey
- Excellent patient outcomes
- Money reinvested to improve care

How can we improve flow & patient outcomes?

2013 Best Practice Recommendations for Stroke Care

www.strokebestpractices.ca



Rehabilitation:

- **Start early, expert team approach**
- **Intensive rehabilitation therapy**
- **Community/outpatient follow-up**

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Rehabilitation across the continuum of care

WHAT IS REHAB?
Rehabilitation improves recovery from disability, restoring function, quality of life and community integration.
It is a progressive, goal-oriented, team approach to enable optimal potential in all abilities: physical, cognitive, communicative, emotional and psychosocial.

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START EARLY!
The Evidence: "Time is Function"

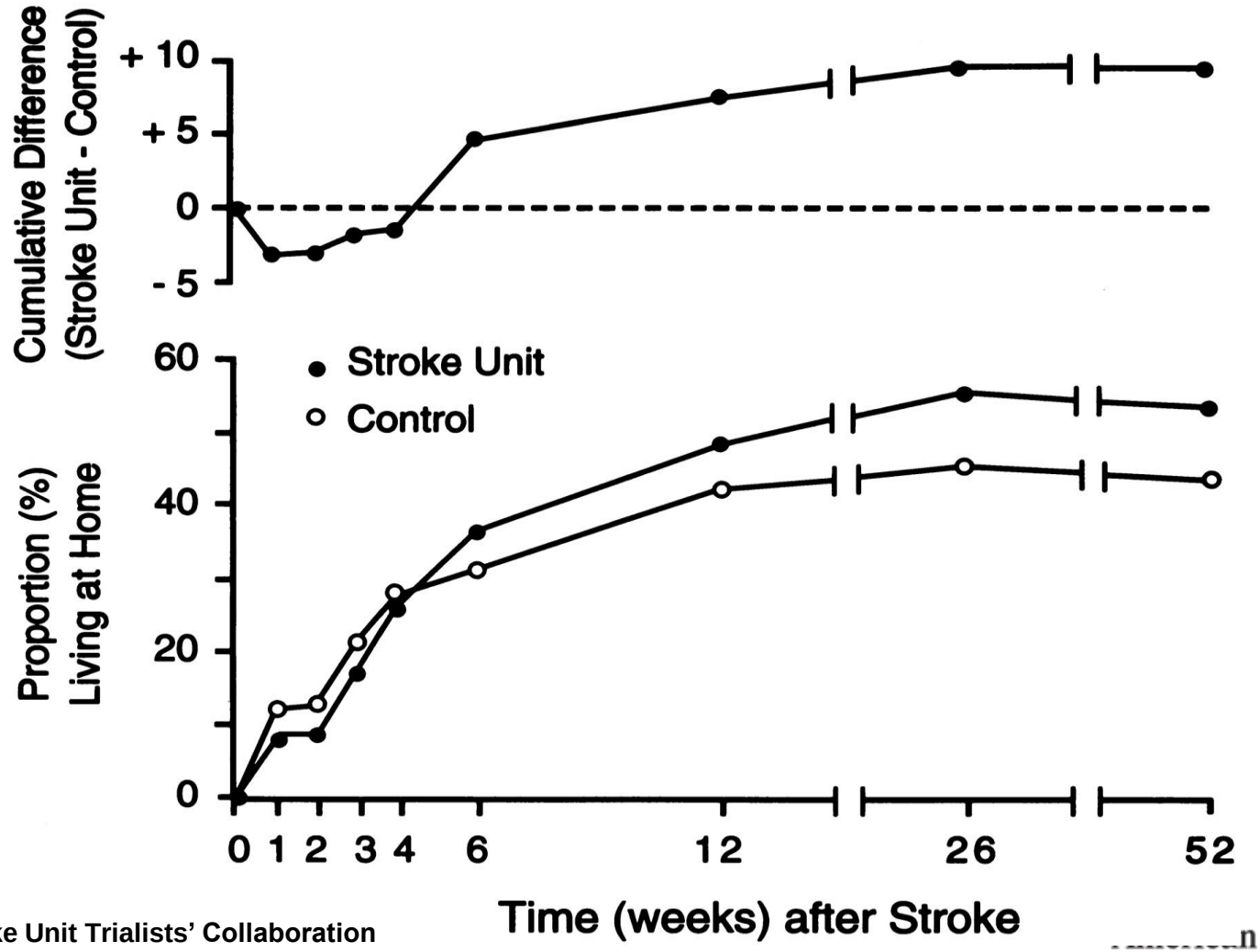
- The brain is "primed" to "recover" early post-stroke
- Acute Stroke Units = early access to an expert team
  - reduce mortality, improve recovery outcomes, reduce LTC
- Delays in starting rehab adversely affect recovery (Biernaskie et al., 2004)
  - Day 5 admission = marked improvement
  - Day 14 admission = moderate improvement
  - Day 30 admission = no improvement vs. controls
- A single day delay in starting neuro rehabilitation affects the functional prognosis and institutionalization rates at discharge (Neurología. 2012;27: 197—201)

Acute Stroke Unit Care

- Patients should be admitted to a **specialized, geographically defined** hospital unit dedicated to the management of stroke patients. (Evidence Level A)

- The core stroke unit team should consist of a healthcare **team of professionals with stroke expertise**. (Evidence Level A)

Proportion of patients living at home after the index stroke and cumulative difference between stroke unit



Stroke Unit Trialists' Collaboration
Stroke 1997;28:2139-2144

American Heart Association
Learn and Live

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Critical Mass for Acute Stroke Units?

- Stroke volumes: at least 165 ischemic stroke patients per year per organization.
- Greater volumes confer additional benefits
- Supported by analysis of Ontario stroke data, 2002–2009

Therapy Intensity

What did the most efficient Stroke Centres do?

- Admitted to stroke rehab units with full interprofessional teams
- Admitted earlier and more disabled (proviso: medically stable)
- More intensive therapy (incl. W/E)
- Less time in assessments
- Move to high level tasks early
- Well developed outpatient services

Reality Check:
Therapy is less expensive than more time spent in hospital beds

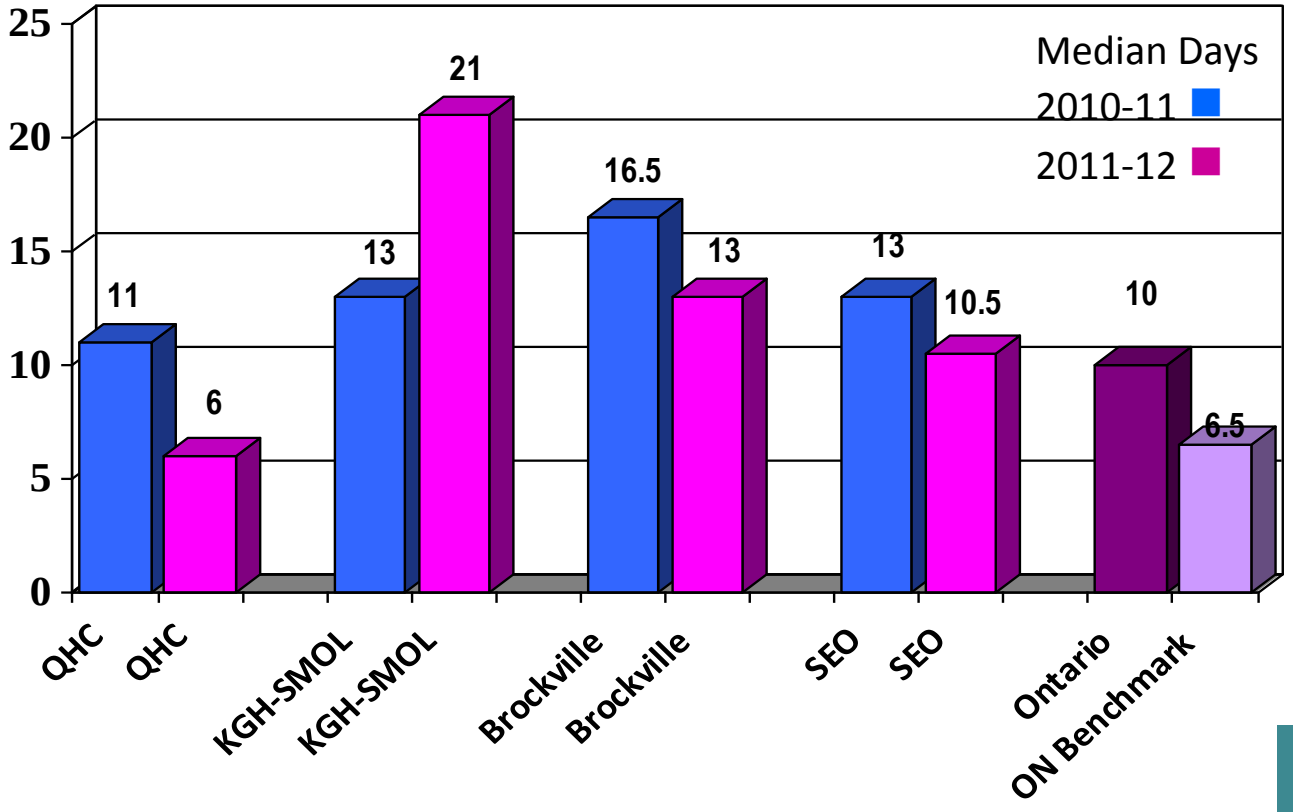
Outpatient & Community-Based Rehabilitation

- Outpatient therapy improves functional outcomes
- Enhanced Community-Based Rehabilitation in SEO demonstrated positive outcomes
- Outpatient therapy is relatively inexpensive (1 PT/1 OT/0.5 SLP/0.5 SW = cost of 1 rehab bed)

The Urgent Platform

- Patient flow crisis; High ALC rates
- Stroke = condition with second highest ALC rate in SEO
- Bed days lost = system costs
- SEO Stroke Report Card: Limited and variable access to rehabilitation
- Quality Based Procedures for stroke care
  - ties funding to best practice

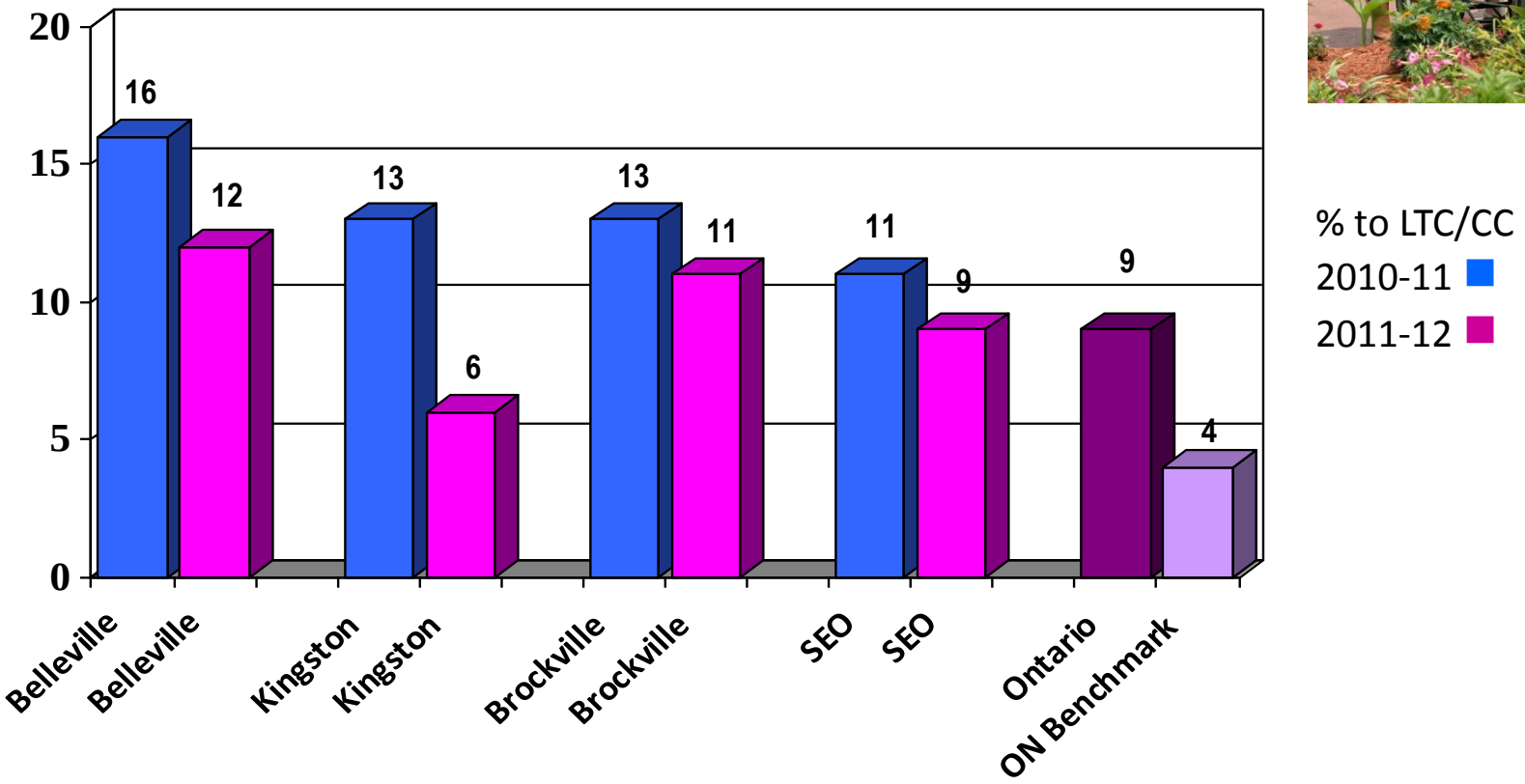
Wait Times (Median Days)
Stroke onset to Rehab Admission
CIHI NRS 2010-12

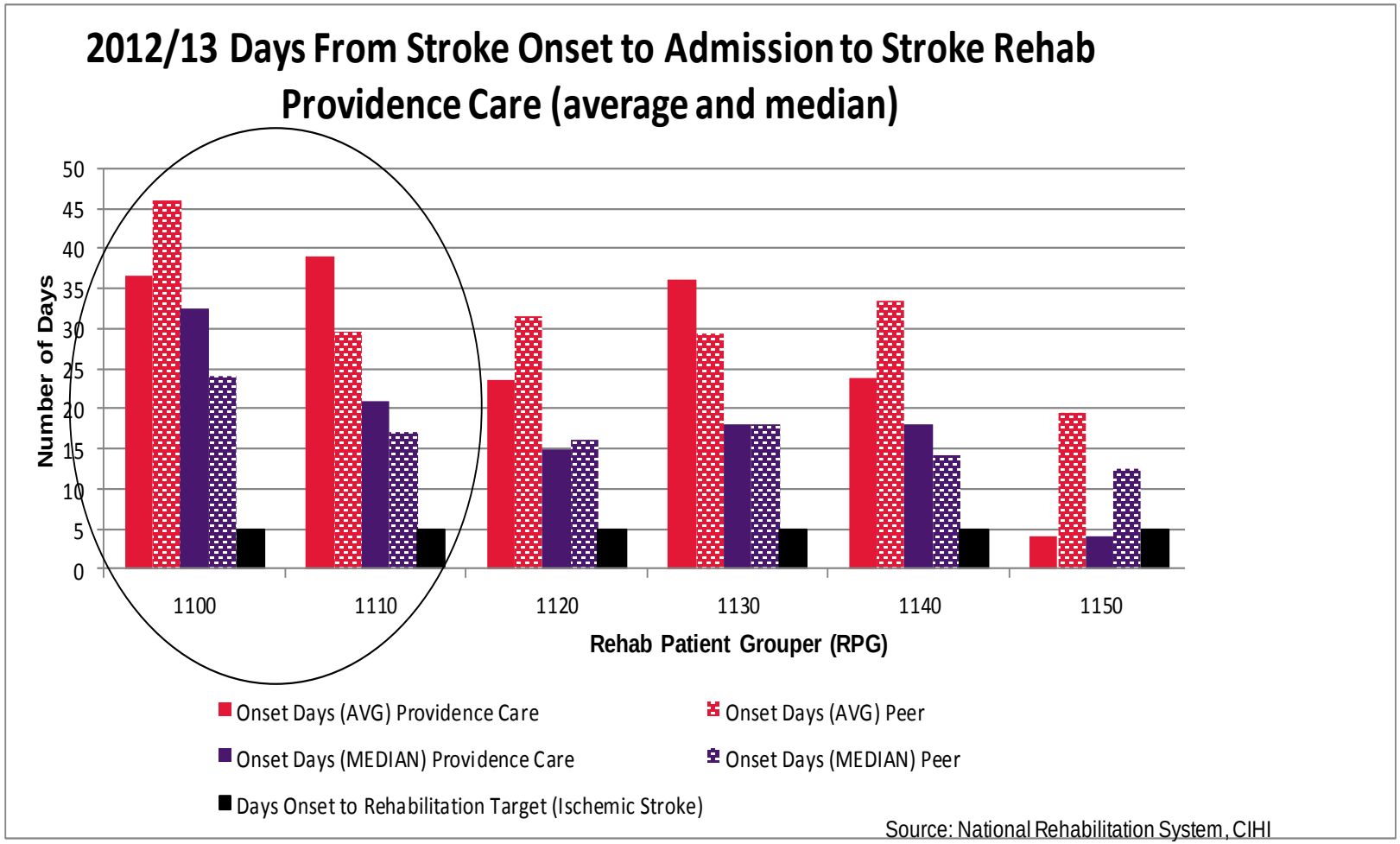


SEO Range
6 – 21 day
median wait

Severe stroke: % Discharged directly from acute to LTC/CC

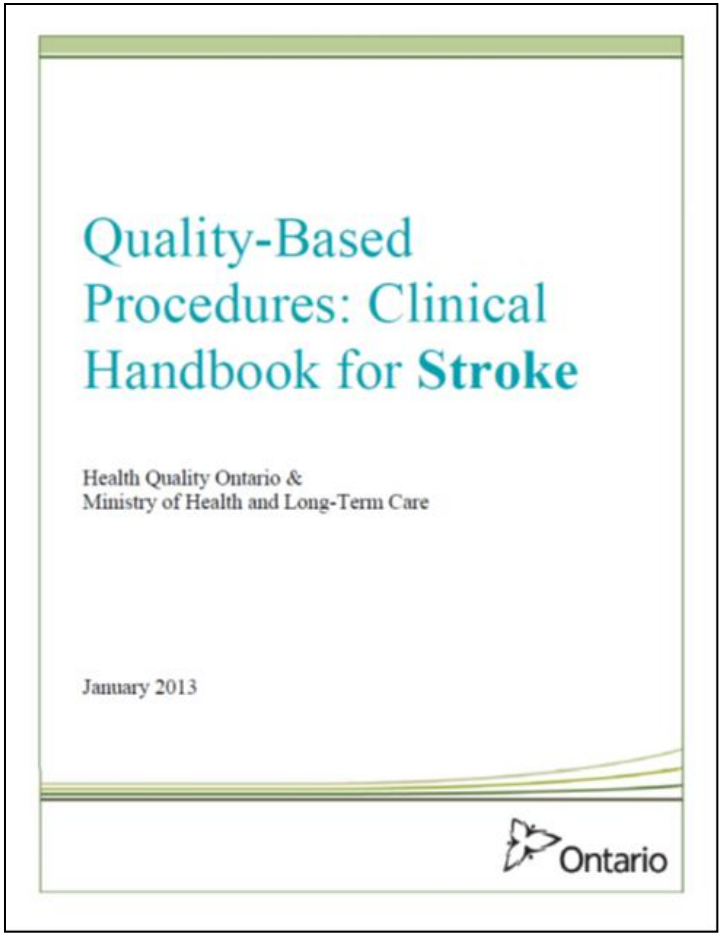
CIHI DAD 2010-12



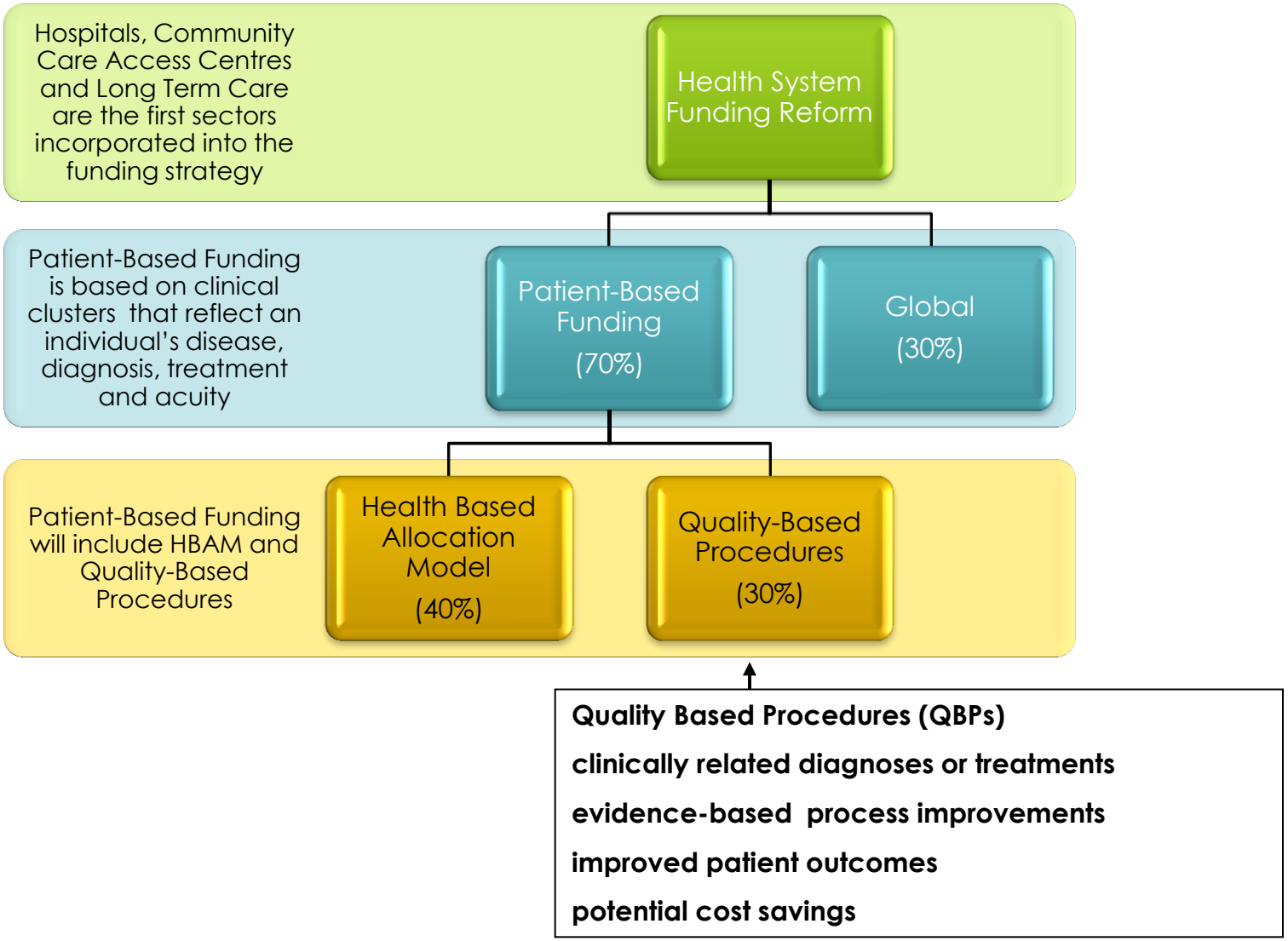


Source: National Rehabilitation System, CIHI

Health System Funding Reform $$$ Quality Based Procedures for Stroke Care



move towards a system where 'money follows the patient'



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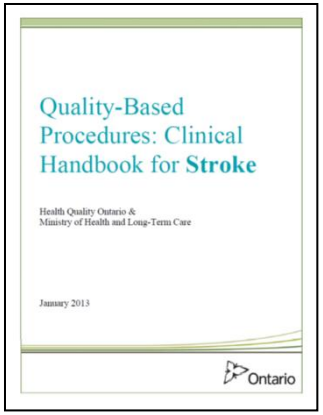
Quality Based Procedures for Stroke Care – Clinical Handbook

- Acute stroke unit interprofessional care x 5-7 days
- Early intensive access to rehabilitation
- Transfer to rehabilitation by day 6 to 8
- Admission to rehabilitation 7 days a week
- Intensification of rehabilitation service
  - 3 hours a day, 6 days a week
- Access to ambulatory/community rehab



The Platform for Change - NOW is the time for regional, organized, holistic solutions

So…..What are we doing about all this?

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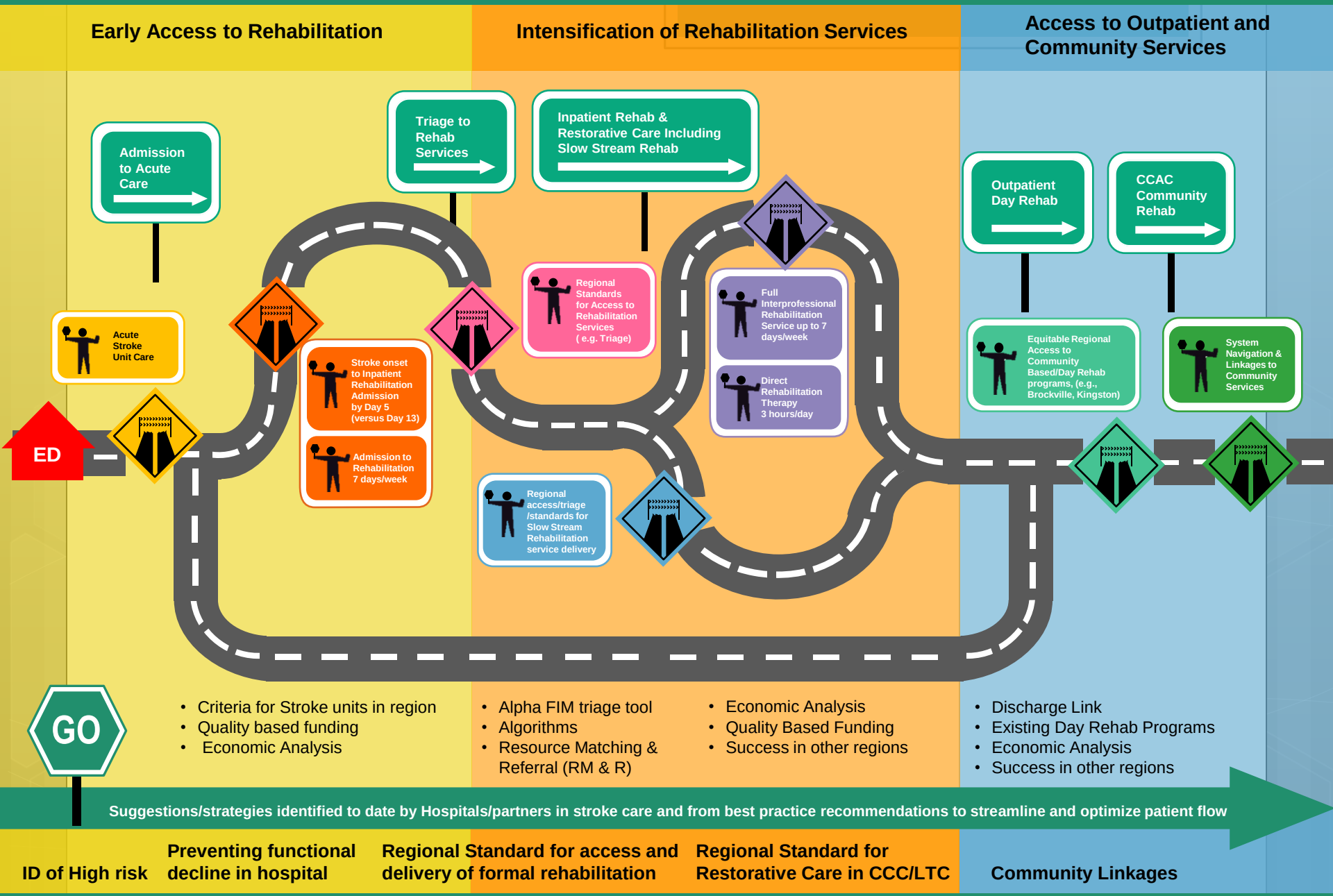
Best Practice Recommendation for Stroke Rehabilitation 2013



Restorative Care Clinical Services Roadmap

Where do we go from here? Imperatives for Improvement

Acute Stroke Unit Care

- ⇨ For HPE - Quinte Health Care – Belleville
- ⇨ For KFLA - Kingston General Hospital
- ⇨ For LLG - Brockville General Hospital

Where do we go from here? Imperatives for Improvement

Increased Options for Access to Rehabilitation

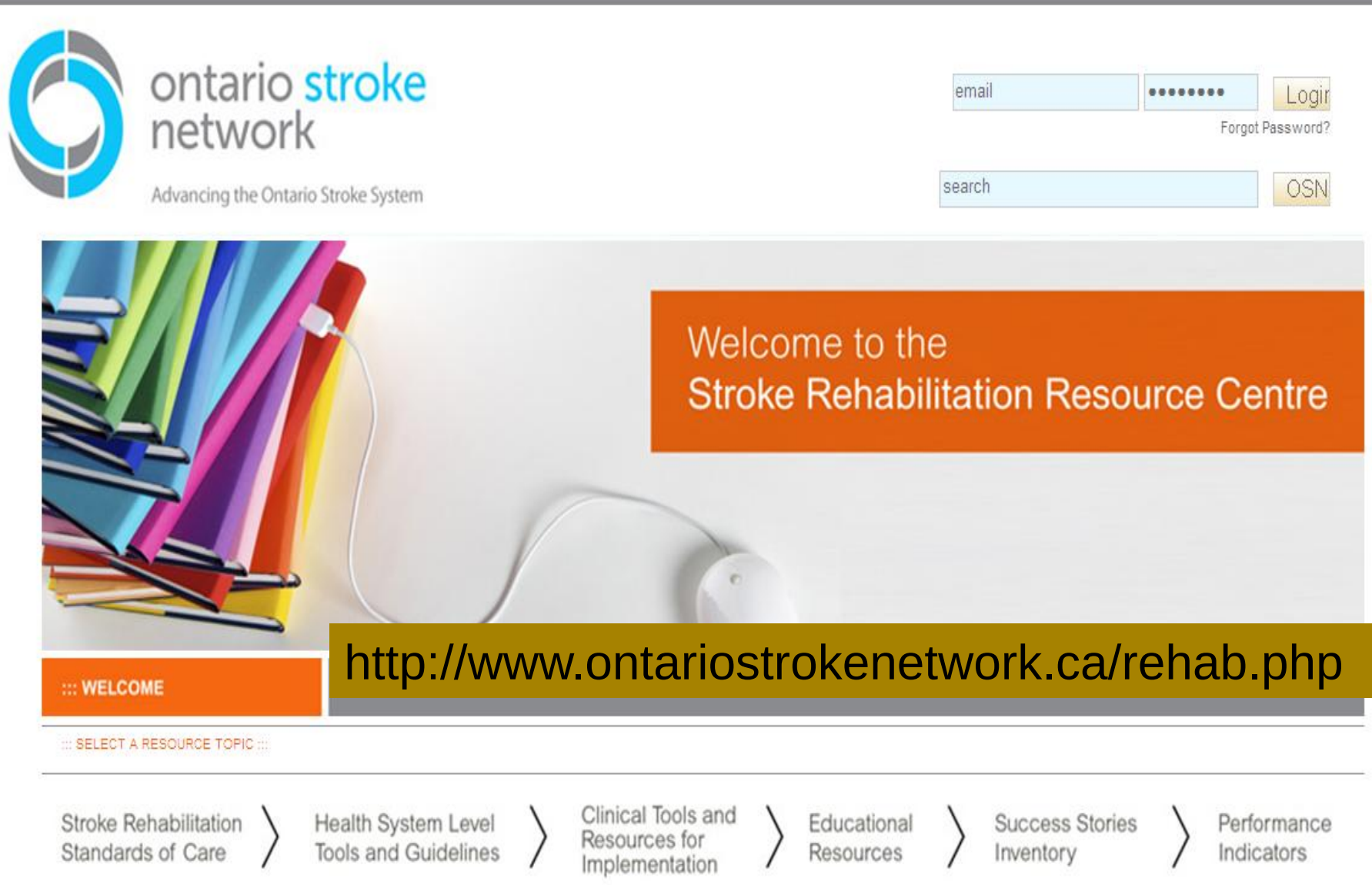
Community

- Day rehab services – Kingston and Brockville
- Ongoing enhanced CCAC rehabilitation services

In-Patient

- Intensity of interprofessional rehab services
- Restorative rehabilitative options for severe stroke

Relevant Provincial Work
We are not alone!



Current ⇒ Future State

"Flo" with Severe Stroke

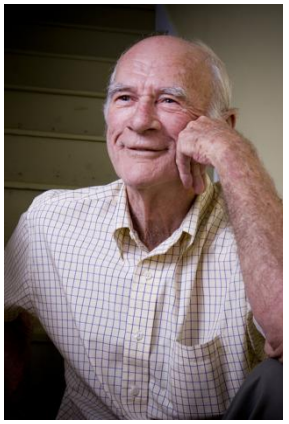
- Woman, lived alone

Current State	Future State
Admitted to General Medicine Unit Developed UTI and pneumonia	Admitted to Acute Stroke Unit 5 day stay Does not develop complications
ALC 4 mos, limited rehab, develops depression	Restorative Rehab Care 6 week stay
Discharged to LTC with limited rehab	Discharged to Residential Care CCAC Enhanced Rehab
Total Inpatient Days = ~4mos + LTC	Total Inpatient Days = 47 days

Current ⇒ Future State

"Mike" with Mild Stroke

- Man - communication deficits, mild motor & cognitive issues



Current State	Future State
Admitted to Acute care for 13 days	Admitted to Acute Stroke Unit 5 days
Admitted to Inpatient Rehab Stays 3 weeks (no intensive outpatient rehab)	Discharged Home Day Rehab 3-4 days/week
Discharged home	
Total Inpatient Days = 34 days	Total Inpatient Days = 5 days

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IMAGINE this!!!

- Access to expert evidence-based care
  - in the right place at the right time
- Positive patient journey
- Excellent patient outcomes
- Money reinvested to improve care

WHAT DOES THIS MEAN FOR YOUR PATIENT? FOR YOUR PRACTICE?

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Celebrate the wins!!

Questions/Discussion

www.strokenetworkseo.ca