

Just a Click Away - Telestroke

Momentum and Milestones Symposium
January 21, 2011

Presented by: Shy Amlani, Manager, Stroke Program,
Edmonton Zone



Agenda

- What is Telestroke?
- How is Telestroke being applied and what are the results?
 - Stroke Prevention
 - Acute Stroke Care
 - Stroke Rehabilitation
- Where is Telestroke headed in the future?

Focus of Presentation

Telestroke services provided by the Edmonton Zone to
Central and North Zones



"Now inhale deeply, Mrs. Saunders."

Agenda

- **What is Telestroke?**
- How is Telestroke being applied and what are the results?
 - Stroke Prevention
 - Acute Stroke Care
 - Stroke Rehabilitation
- Where is Telestroke headed in the future?



What is Telestroke?

- Innovative medium providing patients access to stroke care
 - demonstrates **positive patient outcomes**
 - **cost-effective**
 - utilizes advanced secure telecommunications to enable the exchange of patient information and provision of treatment
- In Central and Northern Alberta, Telestroke is a collaborative effort between clinical programs, IT, Telehealth, Diagnostic Imaging from the Edmonton, North, and Central Zones



Agenda

- What is Telestroke?
- How is Telestroke being applied and what are the results?
 - Stroke Prevention
 - Acute Stroke Care
 - Stroke Rehabilitation
- Where is Telestroke headed in the future?

Stroke Prevention



Alberta's Stroke Network – 2006



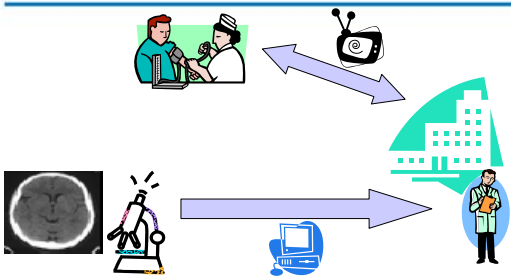
- Comprehensive Stroke Centre
- Stroke Prevention Clinics

Alberta's Stroke Network – Now



- Comprehensive Stroke Centre
- Stroke Prevention Clinics

Stroke Prevention – Process

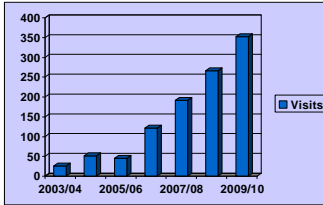


Stroke Prevention – Goals

- Telestroke Prevention visits are available at the UAH, GNCH, and RAH in the Edmonton Zone
- Prevent patients from traveling great distances to receive stroke expertise
- Goal is to **decrease a subsequent stroke event**:
 - Review investigations (cause/risk factors)
 - Medication management
 - Risk factor management/lifestyle modification
 - Assess need for further investigations/referrals

Stroke Prevention – Visits

3 Stroke Prevention Clinics offering Telestroke Prevention assessments and follow-up



↑1250% since 2003/04!

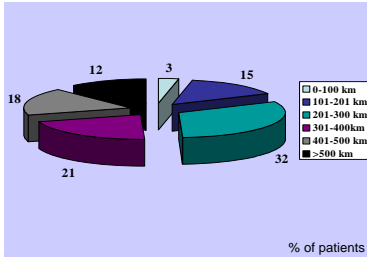
Telestroke Stroke Prevention Sites

Over 52 sites can connect to Edmonton Zone



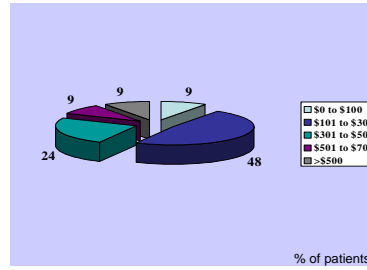
Stroke Prevention – Satisfaction Survey

Patients' Travel Distance to SPC in Edmonton



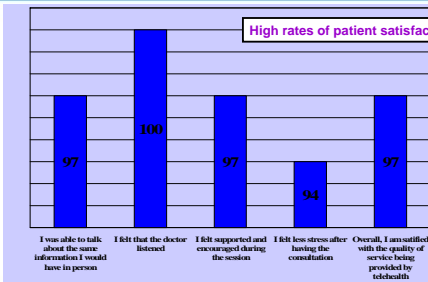
Stroke Prevention – Satisfaction Survey

Patients' Travel Cost



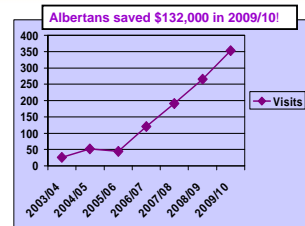
Stroke Prevention – Satisfaction Survey

High rates of patient satisfaction



Stroke Prevention – Cost Savings

- Patients in Northern and Central Alberta report an average cost savings of \$375 per visit



Alberta Health Services

Hyperacute Stroke Care

www.albertahealthservices.ca 19

Alberta Health Services

Alberta's Stroke Network – 2006

20

Alberta Health Services

Alberta's Telestroke Network – Now

21

Alberta Health Services

Hyperacute Stroke Care – Process

www.albertahealthservices.ca 22

Alberta Health Services

Hyperacute Stroke Care – Goals

- Hyperacute stroke care is provided through Telestroke to **10 Primary Stroke Centres** across Central and Northern Alberta by stroke neurologists in the Edmonton Zone (up from 1 Primary Stroke Centre in 2006)
- Stroke treatment
 - Time-is-brain – early treatment essential
 - proximity to treatment is vital – travel can exclude a patient from treatment or result in poor outcome
- Goals of the Telestroke consult:
 - Determine stroke type and appropriate course of treatment

www.albertahealthservices.ca 23

Alberta Health Services

Hyperacute Stroke Care – Consults

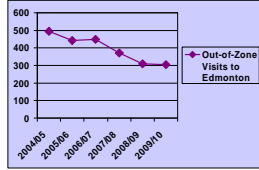
- Approximately 245 calls/year are made to the Edmonton Zone for assistance with acute stroke
- Almost 100/year of these result in a Telestroke encounter
- The number of patients receiving treatment has doubled since the program began
- 1st 2 years – 21% treatment rate compared to national benchmark of 8%

Year	VC (Patients receiving treatment)	tPA (Telestroke encounters)
2005/06	~120	~10
2007/08	~100	~15
2009/10	~100	~20
2010/11 (projected)	~120	~25

www.albertahealthservices.ca 24

Hyperacute Stroke Care – Edm Visits

- A greater number of Albertans are being treated in their own communities
- A 38% decrease in visits to Edmonton has resulted in an annual transfer cost savings of \$390,250

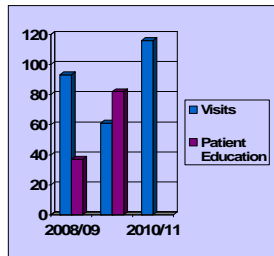


38% decrease in transfers to Edm

Stroke Rehabilitation

Stroke Rehabilitation

- Pre- and post-discharge conferencing with remote sites
- SLP consults
- Patient Education
- Telementoring



*2010/11 projected

Stroke Rehabilitation – Challenges

- Provision of rehabilitation services continues to be:
 - High touch
 - Low tech
- Stroke rehabilitation expertise difficult to find in both rural and urban areas of the province

Summary of Telestroke Application

- Albertans are being treated closer to their home communities
- Patients are receiving acute treatment who may otherwise be outside the time window
- Patients are receiving consults from experts with stroke rehabilitation expertise
- Telestroke is cost-effective with positive patient outcomes

Agenda

- What is Telestroke?
- How is Telestroke being applied and what are the results?
 - Stroke Prevention
 - Acute Stroke Care
 - Stroke Rehabilitation
- Where is Telestroke headed in the future?

The Future of Telestroke

- Fill geographic holes in treatment availability
- Rehabilitation application
- Continued program evaluation
- Technology upgrades

Acknowledgements

- **Stroke Prevention Clinics:**

Fort McMurray	Grande Prairie
St. Paul	Slave Lake
Camrose	Red Deer

- **Primary Stroke Centres:**

Fort McMurray	Grande Prairie
Peace River	Cold Lake
Hinton	Camrose
Lloydminster	Wainwright
Westlock	Red Deer

Questions

