The Stroke Prevention Referral: Tips and Pointers to Improve Patient Care.

Angela Robinson:

Clinical Assistant,
Stroke Prevention, HSC/SBGH
Department of Neurology.

Disclosures:

I have no disclosures.

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Purpose of this presentation:

- To provide referring physicians with a framework for referring patients to the Stroke Prevention Clinic (SPC).
- To improve the quality and effectiveness of consults received by the SPC.
- To showcase the information used by the SPC to triage urgency and appropriateness of the consult.

What is the Stroke Prevention Clinic (SPC)?

Stroke Prevention Clinic…

…is a referral based clinic, operated through Neurology (a subspecialty in Internal Medicine).

…focuses on assessing individuals for secondary and tertiary prevention of Stroke.

-Secondary Prevention- the earliest possible identification of disease so that it can be more readily treated or managed and adverse sequelae can be prevented.

-Tertiary Prevention- concerned with … prevention of further disease-related deterioration.

- (http://medical-dictionary.thefreedictionary.com)

Stroke Prevention Clinic.

- We address 3 key clinical questions:
  - 1. Was the event a stroke/TIA?
    - Stroke Mimics.
  - 2. Why did the Stroke/TIA occur?
    - Type of “stroke”, risk factors.
  - 3. What management is required to reduce risk of stroke in the future?

Sending the SPC a Consult.

Sending a consult: questions to ask before the consult is initiated.

- -Do I actually want Stroke Prevention?
- -What information should I send?
- -Where do I send it?
- -What should I tell the patient to expect?
- -What will the SPC do with my referral?
- -How will I know the patient was seen?

Do I want the Stroke Prevention Clinic?

- Is this an outpatient issue, or this an acute care case?
  - Is this an acute stroke or TIA? Should I be sending the patient to ER?
  - Should I discuss this case with On Call Neurology?
  - Does this patient need urgent Vascular Surgery /Vascular Neurosurgery consultation?
  - The Stroke Prevention Clinics in Manitoba are NOT TIA clinics.

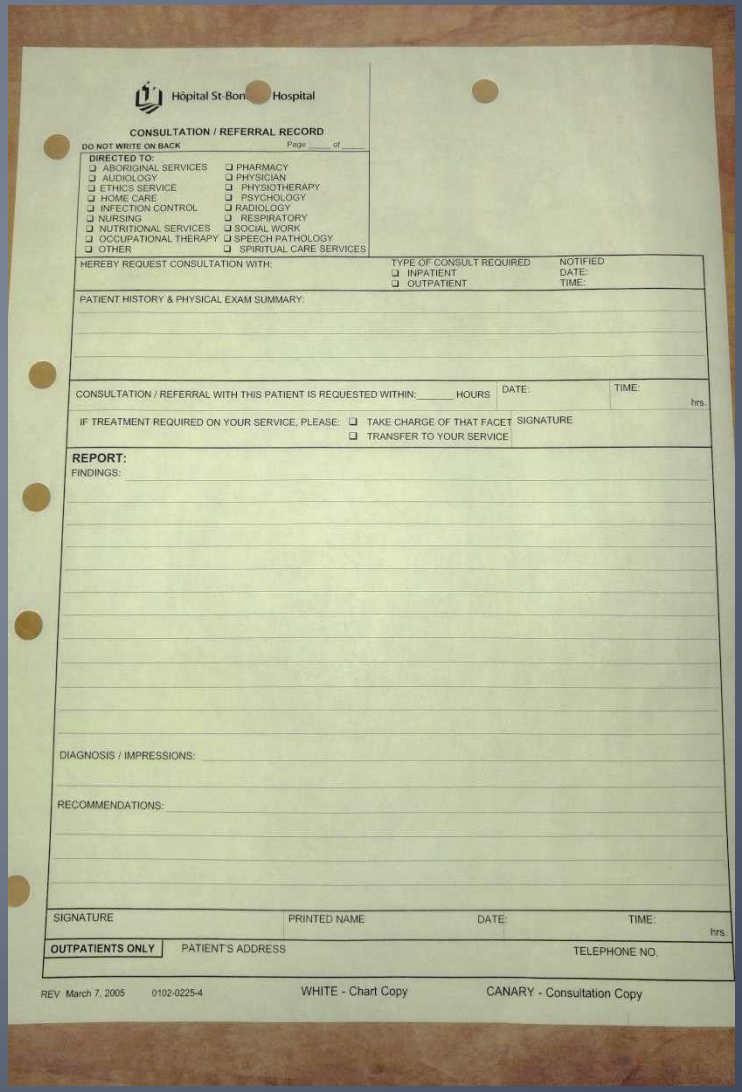
Do I want the Stroke Prevention Clinic?

- Do I want Stroke Rehabilitation?
- Do I want General Neurology?
- Do I want Neurosurgery?

Yes! I definitely want Stroke Prevention!

- So…What information should I send???

The “consult”:



Hôpital St-Bon Hospital

CONSULTATION / REFERRAL RECORD

DO NOT WRITE ON BACK Page ____ of ____

DIRECTED TO:

- ❑ ABORIGINAL SERVICES
- ❑ AUDIOLOGY
- ❑ ETHICS SERVICE
- ❑ HOME CARE
- ❑ INFECTION CONTROL
- ❑ NURSING
- ❑ NUTRITIONAL SERVICES
- ❑ OCCUPATIONAL THERAPY
- ❑ OTHER
- ❑ PHARMACY
- ❑ PHYSICIAN
- ❑ PHYSIOTHERAPY
- ❑ PSYCHOLOGY
- ❑ RADIOLOGY
- ❑ RESPIRATORY
- ❑ SOCIAL WORK
- ❑ SPEECH PATHOLOGY
- ❑ SPIRITUAL CARE SERVICES

HEREBY REQUEST CONSULTATION WITH:

TYPE OF CONSULT REQUIRED
❑ INPATIENT
❑ OUTPATIENT

NOTIFIED
DATE:
TIME:

PATIENT HISTORY & PHYSICAL EXAM SUMMARY:

CONSULTATION / REFERRAL WITH THIS PATIENT IS REQUESTED WITHIN:_____ HOURS | DATE: | TIME: hrs.

IF TREATMENT REQUIRED ON YOUR SERVICE, PLEASE: ❑ TAKE CHARGE OF THAT FACET ❑ TRANSFER TO YOUR SERVICE | SIGNATURE

REPORT:

FINDINGS:

DIAGNOSIS / IMPRESSIONS:

RECOMMENDATIONS:

SIGNATURE | PRINTED NAME | DATE: | TIME: hrs.

OUTPATIENTS ONLY PATIENT'S ADDRESS TELEPHONE NO.

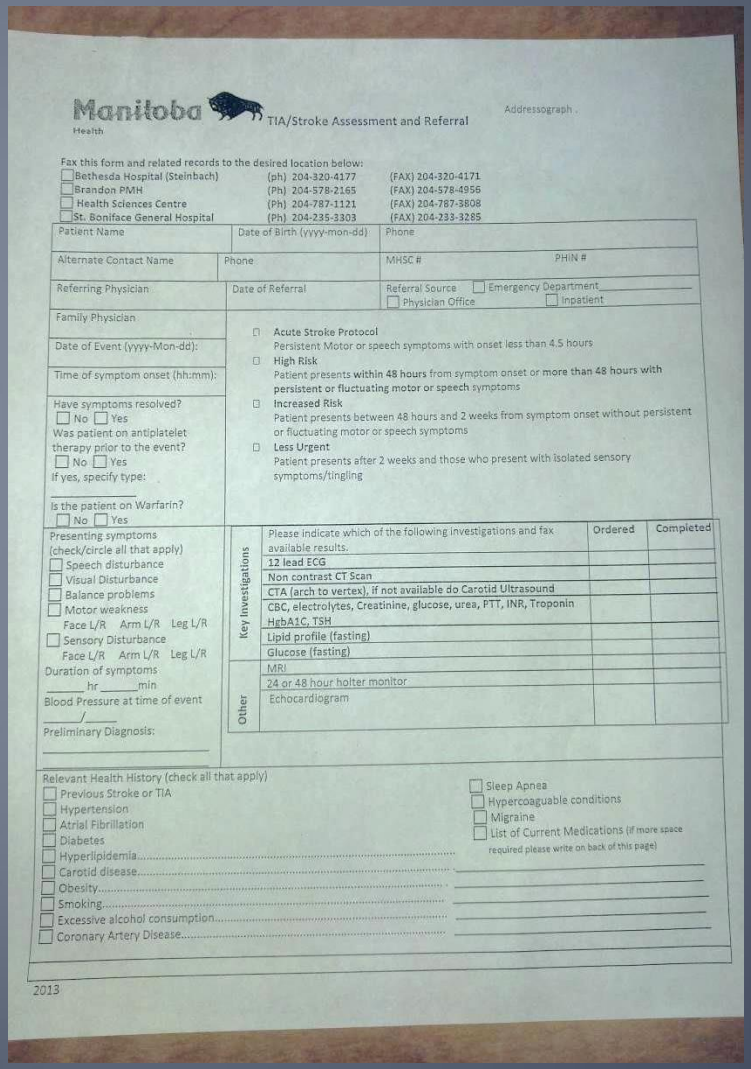
REV March 7, 2005 0102-0225-4 WHITE - Chart Copy CANARY - Consultation Copy

The Consult:

- A consult stating “see for CVA” does not provide sufficient clinical information to triage the patient.

- Additional information and documentation are required.

Manitoba Health referral face sheet:



Manitoba Health

TIA/Stroke Assessment and Referral

Addressograph

Fax this form and related records to the desired location below:

☐ Bethesda Hospital (Steinbach)	(ph) 204-320-4177	(FAX) 204-320-4171
☐ Brandon PMH	(Ph) 204-578-2165	(FAX) 204-578-4956
☐ Health Sciences Centre	(Ph) 204-787-1121	(FAX) 204-787-3808
☐ St. Boniface General Hospital	(Ph) 204-235-3303	(FAX) 204-233-3285

Patient Name	Date of Birth (yyyy-mon-dd)	Phone
Alternate Contact Name	Phone	MHSC # PHIN #
Referring Physician	Date of Referral	Referral Source ☐ Emergency Department ☐ Physician Office ☐ Inpatient
Family Physician		

Date of Event (yyyy-Mon-dd):

Time of symptom onset (hh:mm):

Have symptoms resolved? ☐ No ☐ Yes

Was patient on antiplatelet therapy prior to the event? ☐ No ☐ Yes

If yes, specify type: _____

Is the patient on Warfarin? ☐ No ☐ Yes

- ☐ **Acute Stroke Protocol**
  Persistent Motor or speech symptoms with onset less than 4.5 hours
- ☐ **High Risk**
  Patient presents **within 48 hours** from symptom onset or **more than 48 hours with persistent or fluctuating motor or speech** symptoms
- ☐ **Increased Risk**
  Patient presents between 48 hours and 2 weeks from symptom onset without persistent or fluctuating motor or speech symptoms
- ☐ **Less Urgent**
  Patient presents after 2 weeks and those who present with isolated sensory symptoms/tingling

Presenting symptoms (check/circle all that apply)

- ☐ Speech disturbance
- ☐ Visual Disturbance
- ☐ Balance problems
- ☐ Motor weakness
  Face L/R Arm L/R Leg L/R
- ☐ Sensory Disturbance
  Face L/R Arm L/R Leg L/R

Duration of symptoms _____ hr _____ min

Blood Pressure at time of event _____/_____

Preliminary Diagnosis: _____

	Please indicate which of the following investigations and fax available results.	Ordered	Completed
Key Investigations	12 lead ECG		
	Non contrast CT Scan		
	CTA (arch to vertex), if not available do Carotid Ultrasound		
	CBC, electrolytes, Creatinine, glucose, urea, PTT, INR, Troponin		
	HgbA1C, TSH		
	Lipid profile (fasting)		
	Glucose (fasting)		
Other	MRI		
	24 or 48 hour holter monitor		
	Echocardiogram		

Relevant Health History (check all that apply)

- ☐ Previous Stroke or TIA
- ☐ Hypertension
- ☐ Atrial Fibrillation
- ☐ Diabetes
- ☐ Hyperlipidemia
- ☐ Carotid disease
- ☐ Obesity
- ☐ Smoking
- ☐ Excessive alcohol consumption
- ☐ Coronary Artery Disease
- ☐ Sleep Apnea
- ☐ Hypercoaguable conditions
- ☐ Migraine
- ☐ List of Current Medications (if more space required please write on back of this page)

2013

Manitoba Health:

- The Manitoba Health form contains some, but not all of the required information needed for triaging patients appropriately.

- Please note Shared Health is in the process of modifying this referral form. Some of the issues with the Manitoba Health forms are being addressed, and will be released in the near future.

- Consult reads: “See 72 Male for left CVA”…
- What does this mean?

- “72 yo male woke with **LEFT hand** tingling, lasting 20 minutes”.
- “72 yo male with an incidental **left basal ganglia lacune** seen on CT performed after fall from ladder.
- “72 yo male **sudden onset** 8:45am RIGHT hand tingling and weakness, right face droop **lasting 20 minutes**”.
- “72 yo male with **Left MCA stroke on CT**, CTA shows clot in the M2 segment, persistent right side weakness and aphasia.”

The Consult:

- The more clinical information you provide, the better the SPC can assess the urgency of the referral.
- In general, information helping with ABCD2 scoring is valuable.
- ABCD2
  - Age (≥60yoa)
  - Blood pressure (≥140/90 mmHg)
  - Clinical features (weakness, aphasia)
  - Duration of symptoms (<10 min, <1 hour, >1 hour?)
  - Diabetes?

The Consult:

- In addition to ABCD2 scoring, additional helpful information:
  - Smoker? Recreational drug use?
  - CAD? PAD? Previous Stroke/TIA?
  - Other medical conditions? (Pro-thrombotic state, recently post-partum, rheumatologic diseases, estrogen therapies, history of migraines, seizures, cancer, important family history?)
  - How long ago was the event?

The Consult: Use correct terminology.

- CVA: Do you mean a TIA? A Stroke? Is that Ischemic? Small vessel or large? Or was it Hemorrhagic?
- Dizzy: Vertigo? Ataxia? Presyncope? Confused?
- Numb: Paresthesia/ sensory loss? Weak? Clumsy/ataxic?
- Aphasia: Expressive? Receptive/global/other? OR… do you mean DYSARTHRIA?

****

- If your consult includes terms such as…
  - LOC…
  - confusion…
  - general weakness…
  - bilateral tingling…

  - …Ask yourself : Am I dealing with a Stroke Mimic? Is this another type of neurologic event? Do I actually want SPC?

Supporting Documents:

Supporting Information:

- Clinical notes (GP, ERP), **triage record.**
- EKG, Bloodwork, Imaging (reports if available, or at least what was performed, so we can look up results).
- Medications changed/started?
- Demographics.
- Clearly indicate referring physician. If resident signs consult, ENSURE they INCLUDE Physician name (billing purposes).

Further Information:

- Any other ordered tests (Holters, Echos, MRI)?
- If NO, should you be ordering these?
- Many patients referred for TIA/Stroke have not had ANY vascular imaging, some have not had cerebral imaging. If this is an acute event, this should be done ASAP, not through a referral to the SPC in several weeks- several months.

Vascular imaging

- CTA is preferred, MRA is preferred to Carotid ultrasound.
- A carotid ultrasound is a LAST RESORT test, in the setting of a suspected TIA/stroke.
- A Carotid US may be necessary with the occasional patient with CRF and contra-indication for MRI.
- Carotid US is not effective in assessing posterior circulation or intracranial stenosis.

Where does my consult go?

Stroke Prevention Clinic: Where do I sent my consult?

- Manitoba has THREE separate Outpatient clinics, two in Winnipeg and one in Brandon.
  - (There is no longer a Steinbach SPC)

- While the 3 clinics employ many of the same staff, they are run separately.

Where Do I Send the Consult?

- SBGH: consults from SBGH, VGH, CGH, South and Southeast Winnipeg, Southern and Southeast Manitoba.
  - Fax: 204-233- 3285
  - CV Nurse Michelle Allard #:204-235-3303

- HSC: Consults from HSC, SOGH, GGH, North and Northwest Winnipeg, Northern Manitoba, Nunavut, Northern Ontario (Tele-health access).
  - Fax: 204-787-3808
  - CV Nurse Audrey Gousseau #204-787-1121

- Consults from Western Manitoba are directed to Brandon Stroke Prevention Clinic.
  - Fax: 204-578-4956
  - CV Nurse : Sherry Loewen Phone :204-578-2165

- Please note: There is **NOT** one central intake. The clinics do communicate, but do NOT share the same clinical information/scheduling system. PLEASE don't refer to MULTIPLE clinics. This leads to double bookings and wasted clinic hours.

What should I tell the patient?

Consult sent: what should I tell the patient?

- A consult to Stroke PREVENTION was sent. (“I don’t know why I’m here”, “I thought this was for Rehabilitation.” “I thought I would be with a group for a seminar. “)

- It was sent to…– HSC/SBGH/Brandon. (“The ER doctor said they sent it to Stroke Clinic, why don’t you have it?”)

- They will contact you to arrange an ASSESSMENT. (“I thought I was coming for a test!”)

What NOT to tell the patient:

- "They'll see you in a few days".
  - Depending on wait lists, it can be weeks to months for a date.
- "You'll be going for a test".
  - If we arrange a test before the visit, we notify the patient directly. Otherwise, tests are selected and arranged AFTER the assessment.
- "They'll assess you for REHAB".
  - We are not Stroke Rehabilitation. Their expertise requires a separate consult. We do not routinely arrange OT/PT/SLP.

What NOT to tell the patient:

- Common Occurrences in the SPC:
  - “The doctor told me my CT showed 4 strokes! Why can’t I remember having 4 strokes? This is TERRIBLE news! ”

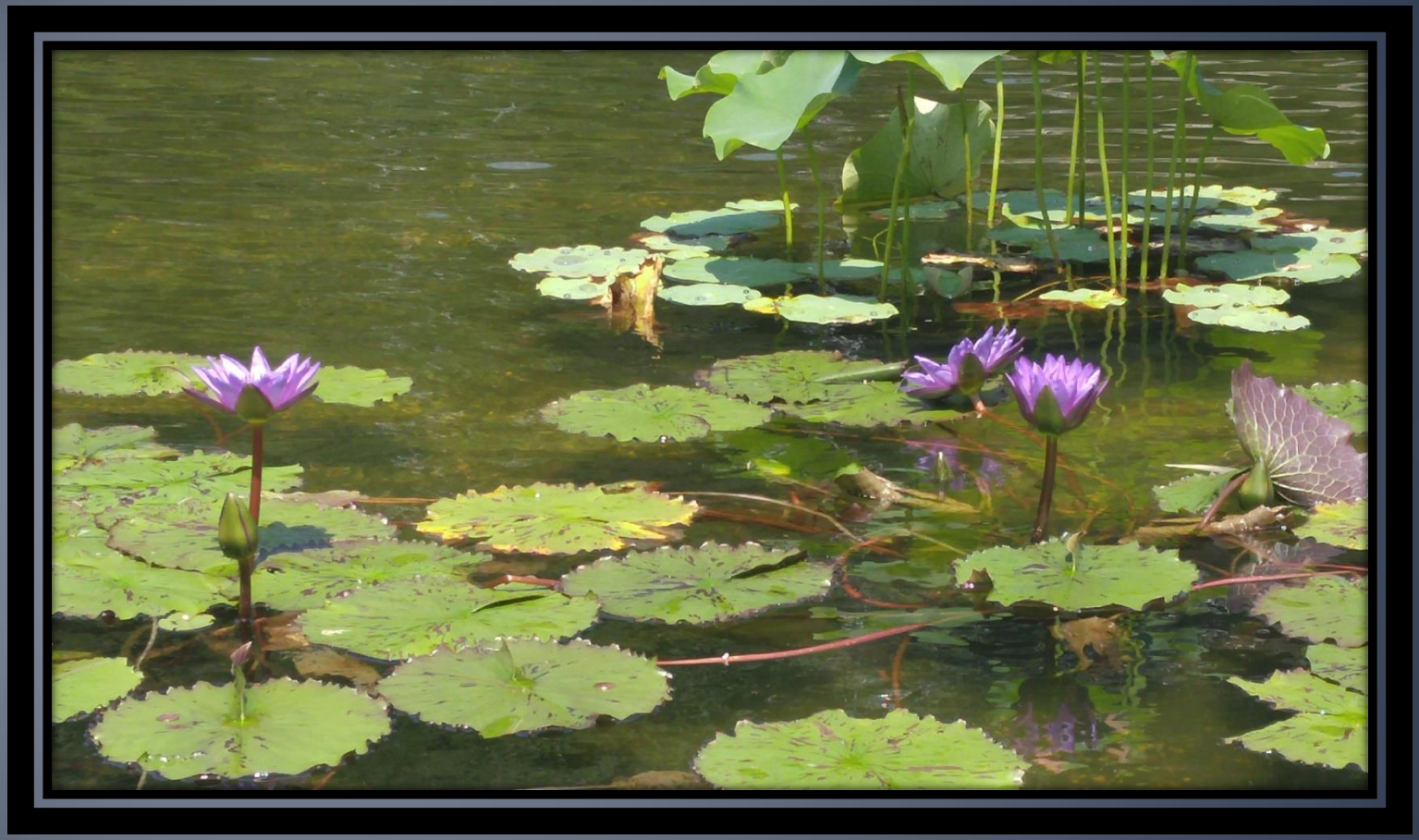
- Patients don’t always understand the relevance of “lacunes” and can be quite upset if they are not explained. Don’t assume telling them they had “little strokes” will reassure them.

What NOT to tell the patient:

Common Occurrence in the SPC…

“Whaddya mean I didn’t have a stroke? That Doctor at the ER /MY doctor told me I definitely DID! Either you’re an idiot, or they are!”

Most patients don’t understand the concept of “differential diagnosis”, or that there are common mimics of stroke. They also tend not to hear the “I think you might have had…” before you say “…a STROKE.”



Now what happens?

What will the SPC clinic do with my consult?

- CVN Audrey/Milaine/Sherry will triage the consult using the information **YOU PROVIDE** to find the most appropriate timeframe for assessment.
- An appointment will be scheduled by the Clerk, and either the CVN or clerk will call for missing information or use EPR/Echart to provide further information.. This can be time consuming.
- If time sensitive, based on the referral information **YOU PROVIDE**, urgent tests MAY BE arranged prior to the appointment. This may also be done for patients flying in or travelling long distance for appointments.

What will the SPC do with my Consult?

- The patient will be scheduled with:
  - Dr. Sadik GHROODA (SBGH/HSC)
  - Dr. Anurag TRIVEDI (SBGH/HSC)
  - Dr. Brian ANDERSON (SBGH)
  - Dr. Arturo TAMAYO (HSC/Brandon)
  - Angela Robinson (HSC/SBGH)

Wait times:

- While we try to accommodate all high urgency consults, the numbers of consults currently triaged by our CVNs is increasing, and no longer allows us to see every suspected TIA/stroke in 1-2 weeks. Wait times may be as long as 3-5 months for many consults.

- In order to appropriately triage patients in this setting, complete referrals with all available tests and clinical notes are required.

- A clinical history, medical history and physical exam will be performed.
- A diagnosis/differential diagnosis will be generated.
- Tests will be arranged, if needed.
- REGARDLESS of whether it was stroke or NOT, risk factors for stroke will be addressed and suggestions made to the patient's Family Physician.

How will I know the patient was seen?

- Assessment letters are sent to:
  - Family Physician
  - Referring Physician, if different.
  - Specialists involved in the patient's care…
    - If the patient divulges all medical conditions.
    - If the specialist is active in current patient care.

Test Results:

- SPC does request that all tests ordered be copied to the Family Physician (we know this does not always occur routinely).

- If test results were not sent to your office, please contact the Stroke Nurse for your clinic, and they will assist in ensuring you get the required results.

Follow Up:

- Follow up on a recurring basis does not occur automatically.
- Most of the basic risk factor/lifestyle modification suggestions are left with the Family Practitioner to manage.
- High Risk patients, or patients with complex medical disorders, may be seen for one, two or prolonged follow up appointments.

Review:

Review: Objectives

- To provide referring physicians with a framework for referring patients to the stroke prevention clinic.
- To improve the quality and effectiveness of consults received by the SPC.
- To showcase the information used by the Stroke Prevention Clinic to triage urgency and appropriateness of the consult.

- SBGH:.
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Thank You!