



TO: Healthcare Partners

FROM: South Dakota Heart Disease and Stroke Advisory Board

DATE: August 10, 2009

RE: Stroke Discharge Packet for Patients

Recently, the American Heart Association, in partnership with the South Dakota Department of Health, the South Dakota Association of Healthcare Organizations, South Dakota State Medical Association, South Dakota Emergency Medical Services, and a diverse group of stakeholders throughout the state finished work on the state's first ever strategic plan to guide and facilitate the development of a collaborative statewide system for heart disease and stroke.

In the area of stroke, our goal is to enhance quality of life for all South Dakotans by reducing incidence of stroke, enhancing care and improving recovery for stroke survivors. Education on evidence-based practices will guide healthcare providers in the prevention, acute care, recovery and rehabilitation efforts to produce measurable improvements in outcomes.

The South Dakota Heart and Stroke Advisory Board is pleased to provide you with the enclosed tool to assist in your organization's care of stroke patients.

This sample stroke education tool can be used by healthcare professionals to comply with the stroke consensus education measure. This educational tool is not to be construed as any of the above named entities providing medical advice, diagnosis, or treatment, and should only be used in consultation with qualified health professionals who are familiar with the patient's individual medical needs.

Our goal for the Stroke Patient Hospital Discharge packet is that every stroke patient in South Dakota receives this education and information before leaving the hospital. It is our hope that patients receive valuable education to help them not only through their recovery process, but also in prevention efforts of a secondary stroke. This tool is a guide for you to use and adapt to your institutional needs.

On behalf of the South Dakota Heart Disease and Stroke Advisory Board, we want to thank you for your consideration of utilizing this Discharge Packet and thereby, join us in our mission to impact the lives of South Dakotans.

Sincerely,

A handwritten signature in blue ink that reads "Colleen Winter".

Colleen Winter
SD Department of Health

A handwritten signature in black ink that reads "Darrin Smith".

Darrin Smith
American Heart Association



Stroke Discharge Packet Implementation Resources

Printing the Discharge Packet Information

- You can download an electronic version of the Stroke Discharge Packet for printing at www.americanheart.org/SDadvocacy and at <http://doh.sd.gov/>. The Plan will be available as a Word document and as a PDF.
- Please feel free to print according to your facility's needs, such as printing in duplicate so that a copy can remain with the facility and one can go with the patient.
- If using the Word version, you can expand tables such as the Medication List or Upcoming Appointments. Or, you can simply attach additional sheets that your facility may already be using.

Additional Resources

You may wish to combine the Stroke Patient Discharge Packet with other information from your facility, such as important phone numbers, information about rehabilitation services or names of individuals at your facility that are available to help them in their recovery.

You may find additional resources offered by the American Stroke Association on their website at www.strokeassociation.org. There you will find free downloadable patient education fact sheets.

Evaluation for the South Dakota Stroke Patient Discharge Packet

Your suggestions are very important to us! We would like you to share your thoughts once you have started using the Stroke Discharge Packet. Simply copy these questions into an email and send your answers to Darrin Smith with the American Heart Association at darrin.smith@heart.org. Or, you can share your feedback by phone at (605) 362-6060.

- Have you begun using the Stroke Discharge Packet?
- How have you used the Stroke Discharge Packet
- Was this resource helpful in your patient education?
- How often did you use (approximate # of patients)
- Did you adapt it for your institution's needs and if so, in what way?
- Suggestions for improvements

For additional questions about this stroke discharge packet, please contact:

Darrin Smith, Director of Advocacy and State Health Alliances
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South Dakota Stroke Patient Discharge Packet

What is a Stroke?

A stroke occurs when the blood supply to a blood vessel in the brain is blocked or a blood vessel breaks causing brain cells in the blood vessel territory to die. Brain cells do not regenerate. The problems experienced after a stroke like the inability to move one side of the body like before, numbness on one side of the body, speech or visual problems are usually a result of brain cells that have died due to stroke. Persons who have had one stroke are at risk of having another stroke. It is important that you practice secondary prevention of stroke now, and this Stroke education sheet will help you and your family do just that. Please be sure to ask us any questions about this information or any other questions about your health.

What to look for: Warning signs and symptoms of stroke

- **Sudden numbness or weakness of the face, arm or leg, especially on one side of the body**
- **Sudden confusion, trouble speaking or understanding**
- **Sudden trouble seeing in one or both eyes**
- **Sudden trouble walking, dizziness, loss of balance or coordination**
- **Sudden, severe headache with no known cause**

What to do if you're having symptoms: Call 9-1-1 to Activate the Emergency Medical System (EMS)

- Not all the warning signs occur in every stroke. Don't ignore signs of stroke, even if they go away!
- Check the time. When did the first warning sign or symptom start? You or the person who is with you will be asked this important question later. This is very important, because if given within three hours of the start of symptoms, a clot-busting drug can reduce long-term disability for the most common type of stroke.
- If you have one or more stroke symptoms that last more than a few minutes, don't delay! Immediately **call 9-1-1** (EMS) so an ambulance (ideally with advanced life support) can quickly be sent for you. Do not drive yourself.
- If you're with someone who may be having stroke symptoms, immediately **call 9-1-1** (EMS). Expect the person to resist going to the hospital. Don't take "no" for an answer because **Time Lost is Brain Lost**.
- When communicating with 9-1-1 (EMS) or the hospital or the hospital make sure and use the word "STROKE".

What you should know: Personal risk factors for stroke

What risk factors for stroke can't be changed?

- **Age** — The chance of having a stroke more than doubles for each decade of life after age 55. While stroke is common among the elderly, a lot of people under 65 also have strokes.
- **Heredity (family history)** — Stroke risk is greater if a parent, grandparent, sister or brother has had a stroke.
- **Race** — African Americans have a much higher risk of death from a stroke than Caucasians. This is partly due to higher rates of high blood pressure and diabetes in this group.
- **Sex (gender)** — Stroke is more common in men than in women. In most age groups, more men than women will have a stroke in a given year. However, more than half of total stroke deaths occur in women. At all ages, more women than men die of stroke. Use of birth control pills and pregnancy pose special stroke risks for women.
- **Prior stroke, TIA or heart attack** — The risk of stroke for someone who has already had one is many times that of a person who has not. Transient ischemic attacks (TIAs) are "warning strokes" that produce stroke-like symptoms but no lasting damage. TIAs are strong predictors of stroke. A person who's had one or more TIAs is almost 10 times more likely to have a stroke than someone of the same age and sex who hasn't. Recognizing and treating TIAs can reduce your risk of a major stroke. If you've had a heart attack, you're at higher risk of having a stroke, too.

What stroke risk factors can be changed, treated or controlled?

- **High blood pressure** — High blood pressure or hypertension is the number one cause of stroke. High blood pressure can damage the small blood vessels of the brain. High blood pressure is the most important controllable risk factor for stroke. Many people believe the effective treatment of high blood pressure is a key reason for the accelerated decline in the death rates for stroke. If you keep your blood pressure below 120/80, you will lower your risk for another stroke. As always check with your physician as to when it will be safe to reach this goal.
- **Cigarette smoking** — Tobacco use in any form, especially cigarette smoking, is very bad for your health. In recent years, studies have shown cigarette smoking to be an important risk factor for stroke. The nicotine and carbon monoxide in cigarette smoke damage the cardiovascular system in many ways. The use of oral contraceptives combined with cigarette smoking greatly increases stroke risk in women. **For help with tobacco cessation, please call 1-800-QUIT-NOW.**
- **Diabetes mellitus** — Diabetes is a risk factor for stroke. Many people with diabetes also have high blood pressure, high blood cholesterol and are overweight. This increases their risk even more. While diabetes is treatable, the presence of the disease still increases your risk of stroke. Diabetes causes disease of small blood vessels in the brain and can lead to a stroke. Keeping your blood sugar within normal range (70-105 fasting) will lower your risk for another stroke.
- **Carotid or other artery disease** — The carotid arteries in your neck supply blood to your brain. A carotid artery narrowed by fatty deposits from atherosclerosis (plaque build-ups in artery walls) may become blocked by a blood clot. Carotid artery disease is also called carotid artery stenosis. **Peripheral artery disease** is the narrowing of blood vessels carrying blood to leg and arm muscles. It's caused by fatty build-ups of plaque in artery walls. People with peripheral artery disease have a higher risk of carotid artery disease, which raises their risk of stroke. Causes of carotid artery disease are high blood pressure, diabetes, a diet high in fat, high cholesterol and smoking.
- **Atrial fibrillation** — This heart rhythm disorder raises the risk for stroke. The heart's upper chambers quiver instead of beating regularly, which can let the blood pool and clot. If a clot breaks off, enters the bloodstream and lodges in an artery leading to the brain, a stroke results.
- **Other heart disease** — People with coronary heart disease or heart failure have a higher risk of stroke than those with hearts that work normally. Dilated cardiomyopathy (an enlarged heart), heart valve disease and some types of congenital heart defects also raise the risk of stroke.
- **Sickle cell disease** (also called **sickle cell anemia**) — This is a genetic disorder that mainly affects African-American and Hispanic children. "Sickle-shaped" red blood cells are less able to carry oxygen to the body's tissues and organs. These cells also tend to stick to blood vessel walls, which can block arteries to the brain and cause a stroke.
- **High blood cholesterol** — People with high blood cholesterol have an increased risk for stroke. High blood cholesterol can be reduced by eating right (avoid fried, fatty foods) and exercising routinely. It may also require medication. Recommended level of LDL (low density lipoprotein) is less than 100 and HDL (high density lipoprotein) is greater than 50 for women and greater than 40 for men.
- **Alcohol intake** — If you drink alcohol, do so in moderation. Heavy drinking can lead to multiple medical complications, including increased risk for stroke. Recommendations: no more than two drinks per day for men and no more than one drink per day for nonpregnant women. Remember that alcohol is a drug. It can interact with other drugs you are taking.
- **Drug use** — Drug addiction is often a chronic relapsing disorder associated with a number of societal and health-related problems. Drugs that are abused, including cocaine, amphetamines and heroin, have been associated with an increased risk of stroke. Strokes caused by drug abuse are often seen in a younger population.
- **Poor diet** — Diets high in saturated fat, trans fat and cholesterol can raise blood cholesterol levels. Diets high in sodium (salt) can contribute to increased blood pressure. Diets with excess calories can contribute to obesity. Include healthy eating habits that include reduced intake of saturated fat, trans fat and cholesterol. A diet containing five or more servings of fruits and vegetables per day may reduce the risk of stroke.
- **Physical inactivity and obesity** — Being inactive, obese or both can increase your risk of high blood pressure, high blood cholesterol, diabetes, heart disease and stroke. Risk factors include elevated waist circumference (equal to or greater than 40 inches for men and equal to or greater than 35 inches for women) and a Body Mass Index (BMI) greater than 25. So go on a brisk walk, take the stairs, and do whatever you can to make your life more active. Try to get at least 30 minutes of moderate physical activity five days of the week, or 20 minutes of vigorous physical activity, three days a week, with your doctor's approval.

___ **Medications prescribed to reduce risk of another stroke** (attach list of medications for patient)

Medication	Taken for what Risk Factor	Dose	How to take	Prescribing MD	Goal
EXAMPLE: Drug name	List reason for taking, such as high blood pressure	XX mg	Explain dosage, time of day to take, etc.	Doctor's name.	List goal, such as "Keep blood pressure below XXX/XX"

___ **Follow-up medical care after you leave the hospital**

- Medications must be taken as prescribed by your doctor in order for them to be effective in reducing your risk of another stroke. Do not stop your medications without speaking to your physician first.
- It is important to keep your scheduled appointments and have your list of medications with you for all of your doctor visits.

___ **Stroke Recovery Resources**

- Physical/Occupational/Speech Therapies – therapy can assist in regaining independence and improve quality of life
- Psychiatrist/psychologist/counseling – depression commonly occurs after a stroke – medication is frequently needed to enhance recovery. Signs of depression can be withdrawn, lack of interest, irritability/anger, tearfulness. For more information or additional signs of depression and a free screening, you can go to the National Mental Health Association www.depression-screening.org
- Stroke Support Groups are available in person or online – for more information go to www.strokeassociation.org or check with your local hospital or rehabilitation facility.

___ **Your Follow-Up Appointments**

Date and Time	Provider	Location (address and phone)	Reason for Visit

This stroke education information has been reviewed with me and/or my family.

Signature of Patient / Family Date

Signature of Nurse / Case Manger Date