

The New Stroke Paradigm

Introduction

For millennia, stroke was a mystery, was once called “apoplexy” (a sudden blow delivered by the gods) and nothing could be done about it. Even in the 20th century, there were limits. The injury could not be arrested and it was believed that recovery only occurred during the first months or year after onset.

Today, accredited stroke centers, t-PA (a medication to dissolve clots), blood flow restoration devices and other comprehensive care are lifesaving advances in treatment of acute stroke. Also, progress in rehabilitation has been made with application of targeted neuroplasticity and technology. Acute and subacute rehabilitation is provided widely.

The next major advance in stroke care should be to empower individuals, families and communities for there are essential actions of prevention, treatment and recovery that no one else can do for them.

- Seventy percent of strokes can be prevented when individuals and families practice a healthy lifestyle, manage risk factors and get proactive medical care.
- For advanced stroke treatment to be successful, families, friends or bystanders must immediately recognize of signs and symptoms, call 911 and get the patient to an accredited stroke center as soon as possible.
- Acute and subacute treatments typically end at about four months and, thereafter, survivors are in charge of their own recoveries, with daily practice of targeted functions. Stroke professionals provide periodic rehabilitation to guide recovery.
- After a stroke, survivors and families prevent subsequent strokes and protect against other illness with self-care, healthy lifestyle, management of risk factors and proactive medical care.
- Communities, concerned individuals, families, businesses, civic organizations, health professionals and facilities all have a vested interest in the success of a stroke system of care, and have much to contribute.

Here are suggestions to empower individuals, families and the public. They are formally educated about their roles and responsibilities to prevent, treat and recover from stroke. After acute and subacute treatment, recovery continues with periodic rehabilitation and daily practice of targeted functions. Treatment is coordinated among providers and facilities as survivors and families are prepared for each stage of treatment. Rehabilitation and reimbursement practices are based on current knowledge of neural repair.

Please read “The New Stroke Paradigm.”

Premise and Promise

Because there have been advances in prevention, treatment, rehabilitation and recovery, this is what the new stroke paradigm can look like today.

1. Individuals and families protect themselves against stroke and other illness by participation in universal wellness and prevention education and practice.
2. An informed public knows the signs and symptoms of stroke and calls 911 immediately, which is critical to restoration of blood flow to the brain.
3. Emergency and critical care is provided at accredited stroke centers.
4. A period of acute inpatient and subacute outpatient rehabilitation is provided after medical stabilization, based on individual needs of each patient.
5. After acute and subacute treatment, recovery continues with periodic rehabilitation and daily practice of targeted functions.
6. Weekly functional exercise classes and support groups guide and empower survivors and families with the synergy of interpersonal connection.
7. Caregivers and family members receive education and support at each stage of the stroke continuum.
8. Survivors and families prevent subsequent strokes and other illness with practice of healthy behavior in wellness classes and teams.
9. With continuity of care, each stage of treatment gets the support it needs. Patients and families are guided throughout the recovery process.
10. After acute and subacute treatment, outpatient services can be provided at low-cost and also improve healthcare outcomes and reduce future medical expense.

Survivors and families who participate in coordinated physical, psychological and social therapies that emphasize education, guidance, interpersonal support, empowerment, practice of recovery skills and self-care, make more progress in functional recovery, have fewer subsequent strokes and have a better quality of life than those who do not.

Are these services available in your community?

Paradigm Perspective

I knew little about stroke, until I had one. Many years later, based on my experience and that of fellow survivors and their families, here is some of what I've learned, followed by ideas that I hope can be a new paradigm for stroke prevention, treatment and recovery, founded on empowerment of individuals and families and integration of stroke services.

Prevention through Wellness

Stroke, heart disease, diabetes, cancer and other illness can be prevented with healthy lifestyle, attention to health risk factors and proactive medical care. All respond to the same universal self-care practices. Working with others in teams at home, work, school, in church and neighborhoods is an effective and enjoyable way to protect our health.

Call 911

A vital goal of emergency stroke care is to restore blood flow to the brain as soon as possible. Those who participate in prevention and wellness programs learn the signs and symptoms of stroke and to call 911 immediately. Treatment at an accredited stroke center can stop, reduce or reverse the injury of stroke.

Family Crisis

After a stroke, patients and families need education about stroke, recovery, emotional and social support and guidance to resources, provided by a hotline, knowledgeable health professionals, experienced survivors and caregivers, and weekly support groups.

Recovery from Stroke

Stroke recovery is a gradual process of biological healing and improved physical, psychological and social functioning that occurs over time with recurrent rehabilitation, education, support, guidance, daily recovery effort and practice by survivors and families.

Empowerment

Initially after stroke, survivors and families experience loss of control and depend on health professionals. On hospital discharge, they often feel anxious because they go home without that support. A next stage of recovery is for them to learn what they can do for themselves to get better, through a process of empowerment and the skills of recovery.

Recovery is an inside job

While the help of others is vital in recovery, survivors and families need to know their role and responsibilities, for there are actions that no one else can do for them. Healing from stroke is an inside job that is strengthened by hope, courage, optimism and trust, and persistent and patient practice of the behaviors of recovery.

Recovery with Others

While there are actions that stroke survivors and families can only do for themselves, they don't have to do it alone. On return home, the next phase of recovery begins with outpatient therapy and support of a community of experienced survivors and families, who understand, encourage and inspire. No one should be or feel alone after stroke.

Return and Plasticity

The path to neurological recovery is "return," which is restoration of lost function, as injured but viable cells heal, and "plasticity," which is the brain's ability to reorganize itself and regain function by forming new connections around deceased cells, and both occur best with recurrent therapy and daily practice by survivors and families.

Simple. Not Easy

Rehabilitation research shows that survivors, who work with simple tools at home, can recover as well as those who work with expensive equipment. A key determinant of success in recovery is regular practice, like learning to play a musical instrument.

Psychological and Social Recovery

Stroke impacts psychological and social functioning, sense of self, independence, security and stability, concerns for the future, and roles and relationships. Stroke affects how survivors and families think, feel, relate and experience life, and this needs to be addressed with the same vigor as physical, occupational and speech therapies.

Attitudes of Recovery

After a stroke, it is understandable to initially dwell on losses. However, in recovery, focus gradually changes as survivors and families concentrate on ways to heal and resume their lives. Powerlessness is transformed into empowerment, disabilities to capabilities, resignation to acceptance, and bitterness to enjoyment of the gift of life.

Progress in Recovery

When survivors and families are frustrated by seemingly slow progress, it helps to know that recovery is a biological process, like the growth of children. No one expects a child to walk at six months or talk at one year. Survivors and families can have satisfying lives, even as they gradually recover, just as they enjoy their children at every age.

Community

We all live in community and much of our ability to protect ourselves comes from what we do together. Each of us has a stake in the challenge of stroke and other illness and every individual, family, health professional, hospital, employer, business, civic agency, college and religious order can be part of the solution.