

Pulse Therapy and Long-term Recovery

1. Physical recovery from stroke is a gradual process of biological healing and improved functioning that occurs over time as a result of recurrent rehabilitation and daily practice of the skills and activities of recovery.
2. Optimal stroke rehabilitation begins with two or three weeks of inpatient therapy, a few months of concentrated outpatient therapy and continues with intermittent, targeted services to help survivors achieve long-term goals.
3. Function can often be restored over time by applying the biological processes of return and plasticity. "Return" is spontaneous restoration of lost function, as injured but viable cells heal. "Plasticity" is the brain's ability to reorganize itself and regain function by forming new neural connections.
4. After the initial course of rehabilitation, return and plasticity can continue to be applied effectively. Bruce Dobkin, M.D., director of UCLA neurological rehabilitation and research, recommends recurrent "pulse therapy."
5. Intermittent pulse therapy and regular practice activate targeted functions until these behaviors become part of daily life. Success in recovery depends on effort between therapy sessions. Someone who only goes to piano lessons but does not practice will never play well.
6. In addition to individual therapy, pulse therapy can be augmented by participation in weekly groups that conduct recovery exercises, educate about return and plasticity, support self-selected goals, and encourage daily home practice.
7. Stroke isolates and individual therapy can be a solitary experience. Survivors and families need to know that they are not alone. Working in a group generates hope, courage, and determination through personal connection, example and inspiration.
8. Because stroke recovery is gradual, it can be difficult to for survivors to see their own progress. Long-term recovery can be recognized with periodic assessment and comparison of survivor and family self-evaluations over time.
9. Support of recurrent therapy by insurance payers is important for long-term recovery. For example, under the Medicare maintenance standard, beneficiaries with chronic conditions and disabilities may receive additional targeted services year to year, including pulse therapy, to support their ongoing recovery needs.

**Neuroplasticity does not stop at six months
and neither should stroke services**