



Rehabilitation and Recovery

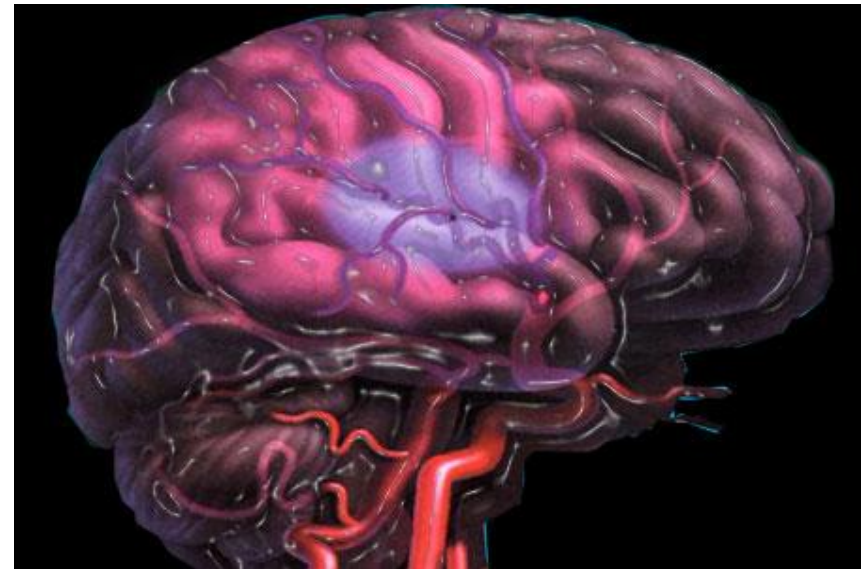
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Stroke

- When a stroke attacks the brain – **acting fast is vital, as time is brain**
- The average stroke destroys two million brain cells every minute





Effects of stroke

- **48% weakness half of body**
- **22% unable to walk**
- **15 - 27% unable to use arm**
- **24 - 53% assistance everyday activities**
- **12 - 18% communication problems**
- **5% swallow problems**
- **32% clinically depressed**
- **33% cognitive impairment**





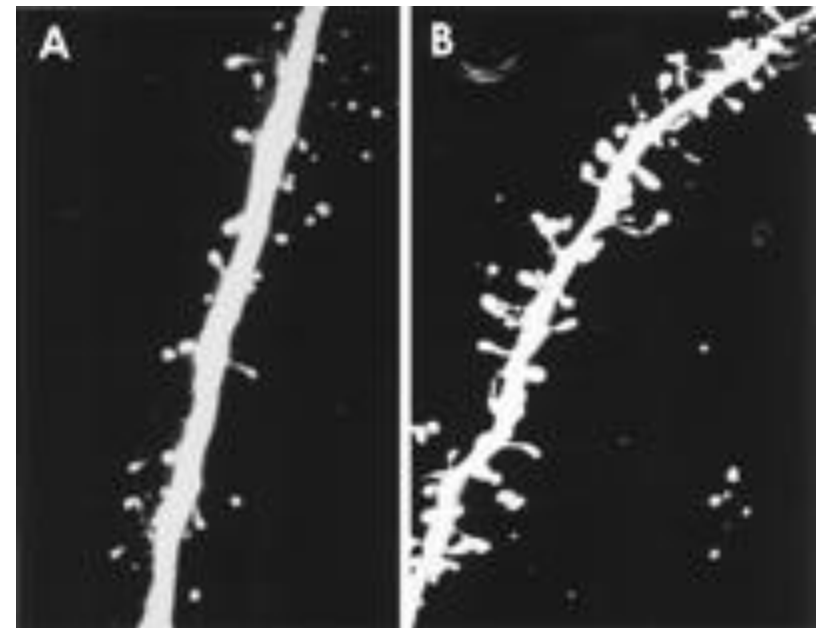
Rehabilitation after stroke

- Rehabilitation **facilitates the** process of **recovery** from injury, illness, or disease to as normal a condition as possible
- The goal in rehabilitation is to **relearn basic skills** that the stroke may have taken away, skills like eating, dressing and walking



Recovery after stroke

- **Neuroplasticity** - ability of brain to adapt
- Rapid recovery - first **4 weeks after stroke**
- Over **months and even years**, other areas of brain learn to take over from damaged areas
- Recovery - can stop or slow down





The multidisciplinary team

- **PATIENT AND THEIR FAMILY**
- **Doctors**
- **Nurses**
- **Therapists**
 - **Physiotherapist**
 - **Occupational therapist**
 - **Speech and language therapist**
 - **Clinical psychologist**
 - **Dietician**
 - **Medical social worker**





Start of rehabilitation



- Medically stable
- First 24 hours
 - Physiotherapy
 - Swallow assessment
 - MDT assessment



Rehabilitation setting



- **Stroke
Rehabilitation Unit
- better outcomes**





Intensity - more therapy is better!

- More time dedicated to learning a specific skill is associated with improved performance
- Repetitive practice
- Patients should receive a minimum of 45 minutes of any therapy that is required, daily, seven days





Physiotherapy

- **Physiotherapy** helps to regain as much **mobility** and **muscle control** as possible
- Up to 80% difficulty with balance





Walking after stroke



- Walking possible for 52-85% of patients following stroke
- However, the gait pattern adopted may not return to normal



Arm weakness after stroke

**Arm weakness is
common after stroke**

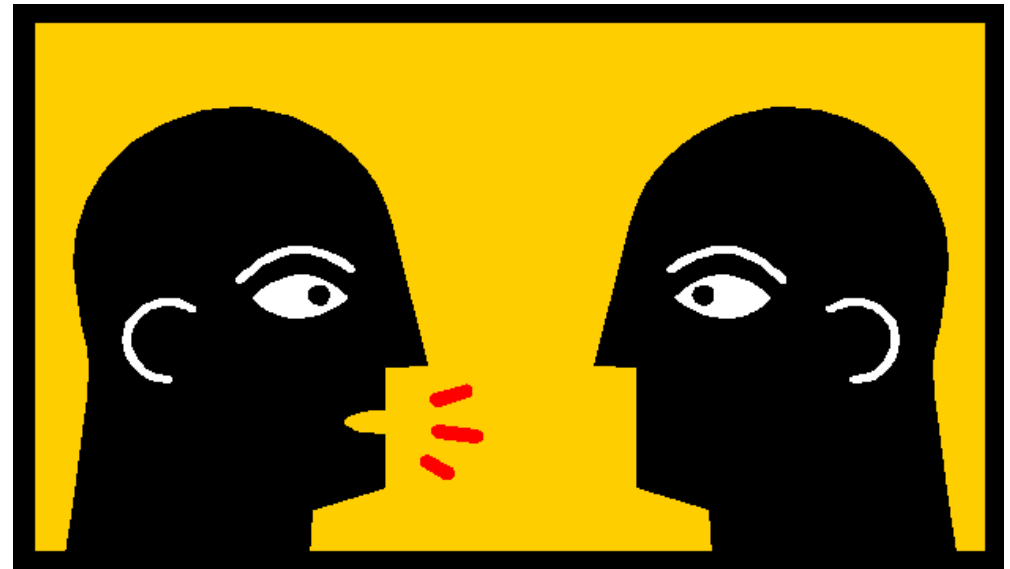


- **1 in 3 patients recover some hand movement at 6 months**
- **Only about 1 in 10 patients show complete arm recovery at 6 months**
- **At 4 years after stroke - 1 in 2 patients report an “enormous problem” using their weak upper limb**



Speech and language therapy

- Swallow problems
 - Up to 50% affected in 1st two weeks
 - 5% have long term problems
- Communication problems
 - Common after stroke
 - Language, understanding, reading, writing



**SLT assessment and
treatment - hospital
and community**



Occupational therapy

- Finding **new ways** of carrying out **tasks** that may have become more **difficult** since the stroke
 - e.g. washing, dressing, eating





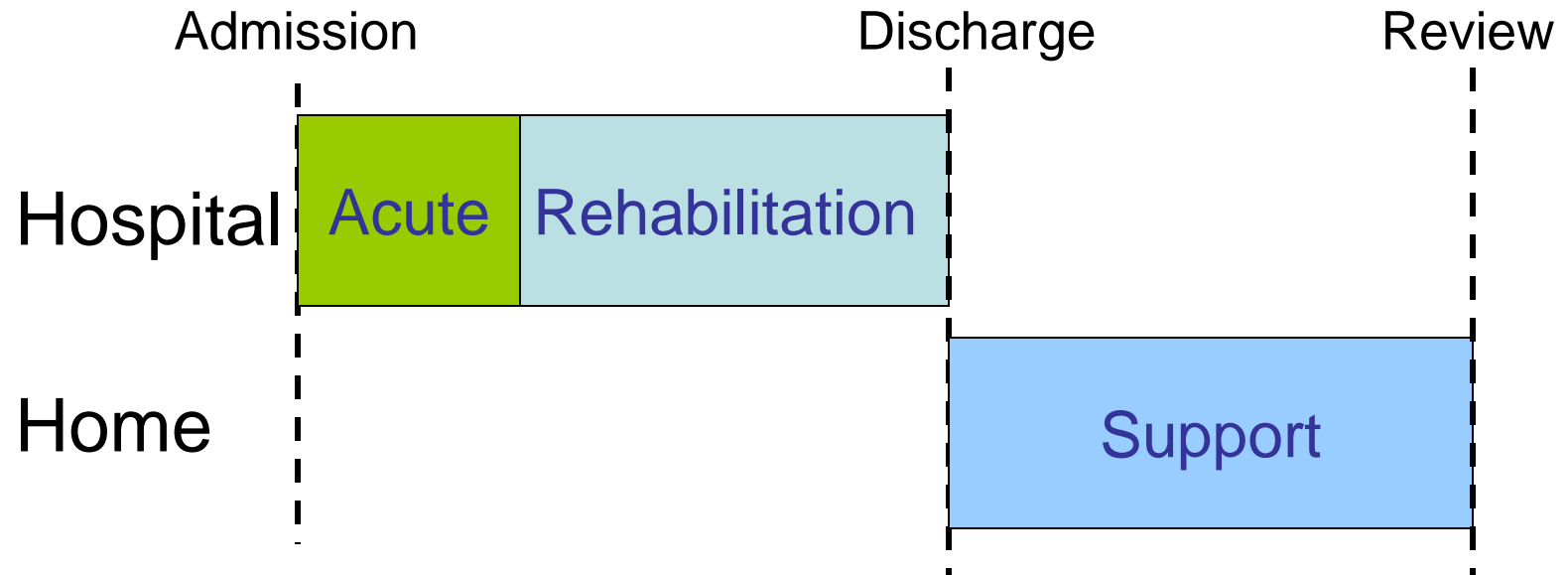
Preparing for discharge home



- Planning and preparation
- Involve family and MDT
- Referral to community services
- Provide information
- Ongoing **liaison** with hospital

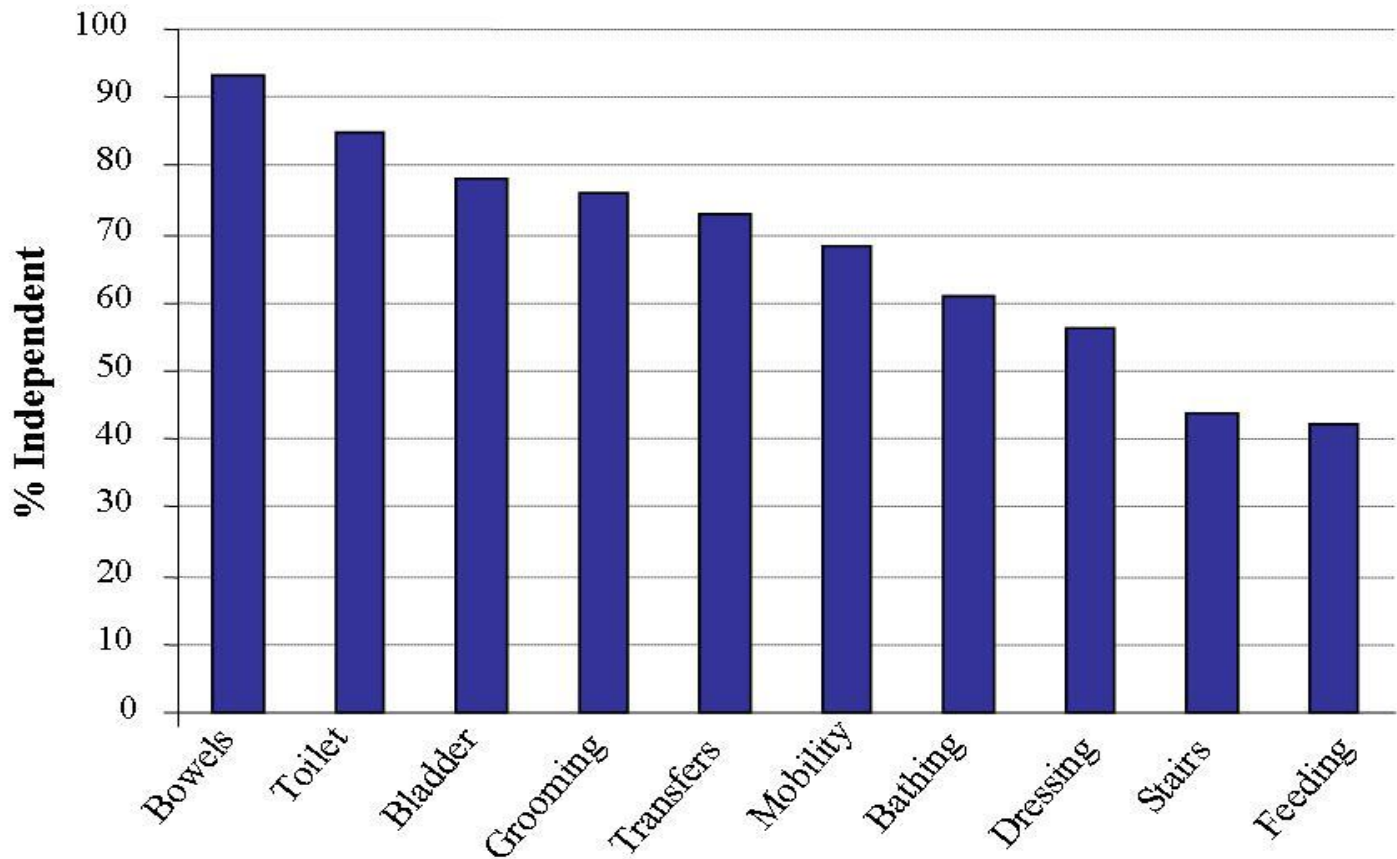


Stroke services



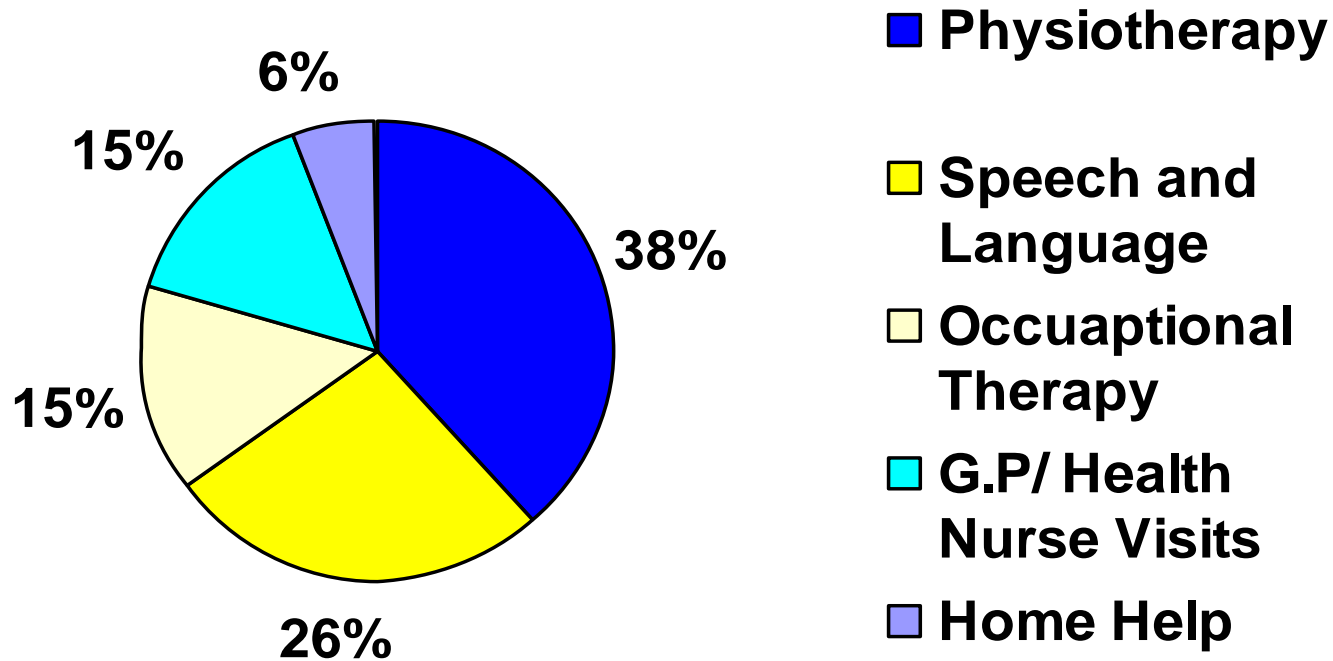


Ongoing needs at one year or more after stroke





Ongoing need for services



Tobin C et al (2008) IJMS



Keeping active after stroke

- Healthy lifestyle - taking more exercise
- The aim should be to achieve **moderate physical activity (sufficient to become slightly breathless)** for 20-30 minutes each day
- **Exercise programmes** should be **tailored to the individual following appropriate assessment** starting with low intensity physical activity and gradually increasing to moderate levels – RCPUK 2008 B (5.3.1)



- **Coming to terms with a devastating illness - a long process - *physical and psychological impact***
- Expectations
- Support and information
- Access to ongoing services
- Re-evaluate progress



Future directions for stroke services in Ireland

- **Government's Cardiovascular Health Policy 2010-2019**

- *....was launched June 10th 2010*





Resources

- www.stroke.ie
 - Irish Heart Foundation's (IHF) new stroke website
 - **IHF National Stroke and Heart Helpline Lo-call 1890 432 787**
- www.iscp.ie
 - The Irish Society of Chartered Physiotherapists
 - Tel 01 4022148
- Email - cpng@iscp.ie
 - Information on Chartered Physiotherapists working with stroke patients