Traumatic Brain Injury and Acute Inpatient Rehabilitation

This factsheet describes acute inpatient rehabilitation after a TBI. It explains what problems are addressed, who is involved, and how to pick a facility. It also talks about what happens after a patient goes home.

What is acute inpatient rehabilitation?

Acute inpatient rehabilitation (rehab) is an intensive form of medical rehabilitation in which patients receive three or more hours per day of core therapies (physical therapy, occupational therapy and speech therapy) overseen by a physician specialized in rehabilitation with around the clock nursing care. This team of physicians, nurses and therapists work together to restore function after traumatic brain injury. Research has shown that participating in inpatient rehabilitation after injury increases the likelihood of discharge to home and decreases risk of mortality among trauma patients, most of whom sustained TBI.

How do I choose an acute inpatient rehabilitation facility?

Here are some factors to consider when choosing an acute rehabilitation facility:

- Is this program covered by the patient's insurance?
- What kind of experience does the staff have?
- What kind of accreditation does the facility have? (This is a process rehab facilities undergo to confirm they meet high standards for care.)
- Can the facility meet the patient's medical needs?

The "References" section of this factsheet lists two resources to help you find an acute rehab unit.

What are some common challenges addressed by acute inpatient rehabilitation?

- **Thinking challenges.** These include problems with memory, language, concentration, judgment, and problem-solving.
- **Physical changes.** These include loss of strength and problems with balance, coordination, movement, and swallowing.
- **Sensory changes.** These include changes in the patient's sense of smell, sight, hearing, and touch.
- **Emotional changes.** These include changes in mood or feeling impulsive or irritable.
- The patient has a new TBI that keeps them from going home to family care.

The Traumatic Brain Injury Model Systems program is sponsored by the National Institute on Disability, Independent Living, and Rehabilitation Research, Administration for Community Living, U.S. Department of Health and Human Services. (See http://www.msktc.org/tbi/model-system-centers for more information).

Who is eligible to receive inpatient rehab?

A patient can receive inpatient rehab if:

- The patient's medical condition is stable enough to allow them to take part in therapy.
- Some insurers, including Medicare, have a specific definition of "participation in therapy" to approve inpatient rehab.
- The patient can make progress in therapy.
- The patient has insurance or other ways to pay for treatment.

How does acute inpatient rehab work?

Therapies are designed to meet the specific needs of the patient. The patient will receive at least 3 hours of different types of therapy throughout the day with breaks in between. The patient will have therapy 5–7 days a week.

The patient will be under the care of a doctor who will see them at least three times a week.

Most people with TBI who are in an acute inpatient unit take part in:

- Physical therapy,
- Occupational therapy, and
- Speech therapy.

Each type of therapy may be given in an individual or group format.

Who is part of the rehab team?

Rehab usually involves a team of highly trained health care providers. Members of the team are from different areas in health care. The team works together every day and shares information about your treatment and progress. At least once a week, the team meets to talk about the patient's progress and discharge plan. This plan describes the patient's care after they leave rehab.

The patient's team may include the following members:

Doctors. This may be a physiatrist (a doctor whose focus is rehab medicine), a neurologist (a doctor whose focus is the nervous system), or another doctor familiar with rehab for TBI. This doctor is in charge of the patient's overall treatment and directs the patient's rehab program. The doctor will:

- Assess the patient's physical abilities.
- Assess the patient's thinking and behavior.
- Prescribe medicine to manage the patient's mood, sleep, pain, and diet.
- Prescribe tailored physical, occupational, and speech therapy.
- Order tests or treatments to help maintain and improve the patient's health.

Rehab nurses. These nurses work closely with the patient's doctor to manage medical problems and prevent medical complications. The nurse will:

- Assess the patient's self-care, bowel and bladder function, sexual function, diet, and ability to move.
- Assist with the treatments of other team members.
- Educate the patient and their family about their TBI and any medicines they take.

Psychologists or neuropsychologists. These doctors will assess and treat any problems the patient has with thinking, memory, mood, and behavior. He or she may counsel the patient's family members or educate them on how to help the patient. The goal is to ensure that the patient's family understands the treatment plan and possible outcomes.

Physical therapists (PT). The PTs will help the patient improve their physical function and ability to move. The PT's role is to teach the patient how to be as independent and safe as possible in their environment. The PT will give the patient exercises and re-train their muscles and nerves. The aim is to restore normal function. The PT will also help the patient strengthen their muscles and improve endurance, walking, and balance.

Occupational therapists (OT). The OT's will work on the patient's activities of daily living to help the patient become more independent. These activities include eating, bathing, grooming, and dressing. They also include moving to and from your bed, wheelchair, toilet, tub, and shower. The OT will work with the patient on strength, balance, and trunk control. Depending on the facility, the OT may:

- Assess the patient's thinking skills. These skills include orientation, memory, attention, concentration, calculation, problem-solving, reasoning, and judgment.
- Assess the patient's vision for any problems.
- Help the patient manage more complex tasks. These include meal prep and cooking, managing money, and getting involved in community activities.
- Recommend and order any equipment the patient may need before going home.

Speech-language pathologist (SLP). The SLPs will treat problems with speech, swallowing, and communication. The SLP will:

- Help the patient understand what others say and speak clearly.
- Teach the patient exercises and techniques to improve their ability to speak and express themselves. This may include exercises to strengthen the muscles used in speech or swallowing. The patient may also learn speech drills to help them speak more clearly.
- Assess the patient's language skills. These skills include orientation, memory, attention, concentration, calculation, problem-solving, reasoning, and judgment.
- Assess the patient's ability to swallow if they have problems swallowing (dysphagia).
- If needed, recommend foods and drinks that the patient can eat or drink safely.

Recreation therapists. These therapists will help the patient find activities to help improve their health and well-being and get the patient back into the community. Getting back into recreation or finding new activities is an important part of recovery. This may include going on outings or taking part in social and group activities in the hospital.

Social workers. The social workers will give the patient and their family information about community resources. He or she will also help with the patient's discharge plan and their return to the community. He or she will:

- Help figure out what benefits the patient is eligible for. This may include Medicaid or Social Security.
- Help the patient and their family find community resources.
- Give the patient ongoing, supportive counseling to help the patient get used to their new situation.

Nutritionist or dietitian. The dietitians will assess the patient's nutritional status. He or she will also make recommendations about good nutrition and the patient's diet. Patients are often underfed and underweight after a hospital stay. Focusing on the patient's diet and how many calories the patient eats each day will help with recovery. The dietitian will also talk to the patient and their family about choosing a menu, the right food consistencies, and diet changes that fit their needs.

What role does the family play during acute inpatient rehab?

The family can:

- Get to know the team members caring for the patient.
- Ask when and how they can take part in therapy sessions.
- Ask about improvements that they can expect to see during rehab.
- Ask questions about the different therapies used.
- Ask about and talk about the discharge process early in a patient's stay; the time in inpatient rehab can be short.
- Go to family training as the patient's discharge gets closer.
- Find out what additional help and supervision the patient may require on discharge from rehabilitation.

What happens after inpatient rehab?

Leaving inpatient rehab is a change that may cause anxiety. Many questions may come up at the time of discharge. These may include:

- How will the patient be able to continue to get better after they leave the hospital?
- Who will take care of the patient when they go home?
- What if the patient needs more help than their family can give them?

To help you through this change, the patient's social worker will make sure that they have what they need to continue to recover after they leave the hospital. As the date of the patient's discharge gets closer, depending on their specific setting, a social worker, care manager, and/or discharge planner will meet with them and their family to form a discharge plan. This team will also:

- Give the patient emotional support.
- Help you get the care the patient needs. This includes figuring out where the patient will get the services they need and who will provide them. They will also help the patient get the most out of their insurance benefits.
- Help the patient find resources that will help them function well in their community. This may include help with finances, home care, and transportation, as well as community therapy services. This may also include government services such as Supplemental Security Income (SSI), Social Security Disability Insurance (SSDI), Medicaid, Medicare, and other disability benefits.

Discharge Plans

Every discharge plan is different. This plan reflects a patient's unique personal and social situation. Recovery from a TBI may take months or even years. Most people will need ongoing therapy after they go home. Discharge plans fall into one of four categories:

Discharge home with referral for home-based rehab services. This plan is for people who are well enough to be at home, but who are not well enough to travel for therapy. In this case, the social worker will refer the patient to a nursing agency. Staff from the agency will come to the patient's home, assess their needs, and give them any needed care. Such care may include physical and occupational therapy. The patient may also need a home health aide. Family is almost always needed to provide some of the help that the patient will need at home.

Discharge home with referral for outpatient services. This plan is for people who are well enough to be at home and can travel to an outpatient clinic for therapy. In this case, the patient's family will provide all the help and supervision they need at home. The patient will go to an outpatient clinic that is convenient to them for all therapy.

Discharge to a residential TBI rehab program. This plan is for people who are well enough to live in the community but need a supervised and structured environment. This option is best for people who do not need inpatient care from a nurse or doctor but may need more therapy to move back into the community. The availability of these programs depends on the patient's insurance and where they live.

Discharge to a nursing facility. This plan is for people who are not ready to go home and who need more therapy in a structured environment with nursing care. In this case, the facility provides nursing care and rehab in specialized rehab wings. These wings are sometimes called subacute rehab or skilled nursing facilities, or SNFs. How long people stay depends on their medical needs, how much progress they make, and other insurance limitations. If the patient's team recommends a nursing facility that provides subacute rehab, the social worker will help them find one that meets their needs.

References

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Authorship

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