

Upper Extremity Functional and Intensive Therapy

What Is Upper Extremity Functional and Intensive Therapy?

Upper extremity functional and intensive therapy (UFIT) helps children strengthen arm and hand muscles for daily activities.

UFIT might incorporate different therapy activities, such as:

- **Constraint induced movement therapy**, which involves wearing a cast on one hand or arm to strengthen the other side.
- Intensive bimanual therapies, which use both hands and arms.
- Exercises using an arm trainer called an Armeo[®]Spring, which is an intensive, repetitive and self-initiated movement therapy.

The ArmeoSpring is a computer-enhanced therapy activity specifically designed for kids who are regaining active movement in the arm and hand. It uses a gravity-assisted frame (called an exoskeleton) to support the arm as a child moves and interacts with virtual reality activities on a computer screen.

Who Benefits from Upper Extremity Functional and Intensive Therapy?

UFIT might help for children and teens who have conditions that affect movement of the hands and arms. These conditions can include:

- **Cerebral palsy.**
- **Complex Movement Disorders.**
- **Traumatic brain injuries.**
- **Brachial plexus injuries.**
- Stroke.
- **Spinal cord injuries and related neurotrauma.**
- **Neuromuscular conditions.**
- **Spasticity** and increased muscle tone in the upper extremities.
- Stiffness, immobility or contractures.

Even if your child has moderate to severe impairment of the hands or arms, they can perform exercises using the ArmeoSpring. To be a good candidate for using the ArmeoSpring, children usually:

- Are at least 5 years old.
- Can follow simple commands.
- Can signal or communicate pain, fear or discomfort.
- Can tolerate at least 20 minutes of therapy exercise.
- Have the visual skills to see a computer screen positioned 2 feet away.
- Understand cause and effect.

Preparing for Upper Extremity Functional and Intensive Therapy

Before your child begins UFIT, we schedule appointments with you to:

- Evaluate if ArmeoSpring might be a good option within your child's treatment plan.
- Fit your child for the ArmeoSpring.

To get ready for ArmeoSpring therapy appointments, your child should:

- Bring any upper extremity braces or splints they typically wear.
- Plan to arrive 15 minutes early so we can start therapy immediately at the beginning of your appointment.

What to Expect During Upper Extremity Functional and Intensive Therapy

At Gillette, UFIT therapy sessions are scheduled for 60 minutes. Most of the time, kids use the ArmeoSpring for exercising for 20 to 30 minutes, followed by other therapy activities.

Most children who use the ArmeoSpring as part of an **occupational therapy** program typically come to Gillette two to three times each week for sessions.

During UFIT therapy with the ArmeoSpring:

- A therapist adjusts the exoskeleton device to fit your child's arm and capabilities.
- Your child wears the exoskeleton, which embraces the arm from shoulder to hand.
- The ArmeoSpring detects and assesses your child's motor ability, coordination and performance.
- The ArmeoSpring counterbalances the weight of your child's arm, which enhances function and neuromuscular control so that your child can participate in active movement.
- A therapist tracks your child's progress and determines a plan for future exercises.
- The ArmeoSpring at Gillette features virtual reality games that can help entertain and motivate your child.

The ArmeoSpring lets kids work on a variety of hand and arm motions, including:

- Grasp and release.
- Raising the arm out to the side (shoulder abduction).
- Raising the arm up (shoulder flexion).
- Turning the palm up and down (pronation and supination).
- Wrist flexion and extension.

Following sessions with the ArmeoSpring, your child should participate in any at-home activities suggested by an occupational therapist. After UFIT therapy is complete, we schedule a follow-up visit with your child.

Integrated Care

You can expect a coordinated approach to your child's overall wellness at Gillette. In addition to the hand specialists who facilitate UFIT, your child might work with other experts, including:

- [Music therapy](#).
- [Neurology](#).
- [Orthopedics](#).
- [Physical therapy](#).
- [Rehabilitation medicine](#).
- [Speech/ Language therapy](#).

We take care of determining which services your child needs and when—you don't have to worry about navigating treatment alone.

Additionally, your child works with specialists at Gillette who contribute to the latest in rehabilitation technology and [research](#), and belong to one of the nation's top providers of pediatric [inpatient](#) and outpatient rehabilitation services.

Locations

The ArmeoSpring is available at our St. Paul location. Other UFIT options, such as constraint induced movement therapy, are available at all therapy sites. See all Gillette [hospital and clinic locations](#).



[St. Paul Campus](#)

[Appointment: 651-290-8707](#) [Refer a Patient: 651-325-2200](#) [Pediatric Expert Consult](#) [More Ways to Contact Us](#)

This information is for educational purposes only. It is not intended to replace the advice of your health care providers. If you have any questions, talk with your doctor or others on your health care team.

If you are a Gillette patient with urgent questions or concerns, please contact Telehealth Nursing at [651-229-3890](#).