



**Gillette Children's**  
*Specialty Healthcare*



**All About Gillette**

# Contents

- 5 Our Mission**
- 6 Building on Tradition**
- 9 Our Multidisciplinary Approach to Care**
- 10 Our Centers of Excellence**
- 27 Our Services for Adults**
- 28 Our Inpatient Units**
- 31 Our Patient Services**
- 37 Our Locations**

This publication gives an overview of the medical specialties and services available at Gillette Children’s Specialty Healthcare. We offer care to patients and families through our centers of excellence, clinics and other programs. Our Web site ([www.gillettechildrens.org](http://www.gillettechildrens.org)) contains detailed information about each center. For general information about Gillette, call 651-291-2848 or 800-719-4040 (toll-free).

## On the cover —

*Mark Gormley Jr., M.D., builds rapport with Analise, who has cerebral palsy. As a pediatric rehabilitation medicine physician, Gormley focuses on therapies that reduce spasticity and minimize functional limitations.*

**E**very child has hopes and dreams, and the children who come to Gillette are no different. They simply have more barriers and challenges before them. At Gillette, we've been helping children get around those barriers — and turn dreams into reality — for more than 100 years.

Steven Koop, M.D.  
*Medical Director and Orthopaedic Surgeon  
Gillette Children's Specialty Healthcare*



Anne, age 9



*Stephen England, M.D., checks the progress of Joseph's fracture. Each year, our orthopaedists see thousands of children who have spine, hip, and upper- and lower-extremity problems.*

## Our Mission

**G**illette Children's Specialty Healthcare meets the special health-care needs of people — primarily children and teens — who have disabilities. Our mission is to help those we serve realize greater well-being, independence and enjoyment in life.

We combine medical, nursing, therapeutic, technical, psychosocial and other expertise in family-centered programs. We provide

services at our clinics, in our hospital and throughout the region, in response to community needs and often in collaboration with other organizations. We seek to build community partnerships that help continue our mission and enhance care for people who have disabilities.

*Brandon, age 12*



## Building on Tradition

Since 1897, Gillette has been making a difference in the lives of children who have disabilities. As a leader in medical technology, services, education and research, we offer innovative treatments for people who have disabilities and complex medical conditions. Underlying our medical expertise is the care, dignity and respect that our patients and their families receive in our hospital and clinics.

### Our Family-Centered Team Approach

At Gillette, patients and their families participate in care decisions. They often meet with several Gillette team members before

selecting treatments. Then the team collaboratively designs care plans to address patients' physical and developmental needs.

### A Regional Referral Center

Gillette serves as a regional referral center for patients who live throughout the Upper Midwest. Our patients range in age from infants to adults. We offer a multidisciplinary team of specialists at our main campus in St. Paul, at our three outpatient clinics throughout the Twin Cities, and at our Duluth (Minn.) clinic. For patients who live in greater Minnesota, we provide assistive-technology services, and some physician and nurse-practitioner services, through our Mobile Outreach Clinic.

Since 1897!



Rachel, age 6



*Sarah Gutknecht, pediatric nurse practitioner, follows up with Charles during his treatment for clubfoot. After wearing a series of casts, Charles was fitted for orthopaedic shoes.*



*Marshall Taniguchi, M.D., medical director of Gillette's Center for Pediatric Rehabilitation, and MaryBeth Waldo, pediatric nurse practitioner, test the range of motion in Pete's leg. Pete receives regular therapy to address complications of cerebral palsy.*

## Our Multidisciplinary Approach to Care

**G**illette's experienced pediatric specialists — many of whom are internationally known for their expertise — make up our medical teams. They collaborate on patients' care plans, consulting with other specialists as needed. Patients' diagnoses determine which specialists they see. Our staff includes physicians in the following medical specialties:

- Anesthesiology
- Cardiology
- Craniofacial surgery
- Critical care
- Dentistry
- Endocrinology
- Gastroenterology
- Genetics
- Internal medicine/pediatrics
- Neurodevelopmental pediatrics
- Neurology
- Neurosurgery
- Orthodontics
- Orthopaedic surgery
- Pediatrics
- Plastic surgery
- Psychiatry
- Pulmonology
- Radiology
- Rehabilitation medicine
- Rheumatology
- Sleep medicine
- Surgery
- Urology

To learn more about our medical specialties, call 651-325-2320 or 800-719-4040 (toll-free). Ask for our physician directory.

In addition to our physician specialties, we offer expertise in:

- Anesthesia and perianesthesia
- Assistive technology
  - Orthotics
  - Prosthetics
  - Rehabilitation engineering
  - Seating
- Casting
- Chaplaincy
- Child life
- Care coordination
- Infant and toddler assessments
- In-hospital schooling
- Motion analysis
- Neuropsychology
- Nurse-practitioner care
- Nursing
- Nutrition
- Occupational therapy
- Pain management
- Physical therapy
- Psychology
- Respiratory care
- Social work
- Speech and language pathology
- Therapeutic recreation

Kelsey, age 5



## Our Centers of Excellence

Treating people who have disabilities and complex medical conditions requires a team of experts. At Gillette, our doctors, surgeons, nurses, therapists, orthotists, psychologists, social workers and other specialists work

together to care for patients. Throughout our centers of excellence, we offer leading-edge medical treatments tailored to the unique needs of each patient.



- Center for Cerebral Palsy
- Center for Craniofacial Services
- Center for Gait and Motion Analysis
- Center for Pediatric Neurosciences
- Center for Pediatric Orthopaedics
- Center for Pediatric Rehabilitation
- Center for Pediatric Rheumatology
- Center for Spina Bifida

Emma, age 6



*Michael Partington, M.D., medical director of the Center for Spina Bifida, and registered nurse Marsha Keene examine Chloe during an outpatient visit at Gillette's St. Paul Clinic. We often begin seeing our patients as infants and provide age-appropriate care throughout their lives.*



Center of Excellence

## Center for Cerebral Palsy

Gillette’s Center for Cerebral Palsy provides specialty health-care services to children and teens (see page 27 for information about our services for adults). Cerebral palsy is a disorder caused by damage to the developing brain — before, during or shortly after birth.

### Types of Cerebral Palsy

Doctors classify cerebral palsy into several types, based on the location and extent of brain damage, the body parts affected, and the kinds of tone and movement difficulties present. Injuries to different parts of the brain cause different types of problems.

#### Spastic

Injuries to the cerebral cortex (area that produces a person’s desire to move) can result in spastic cerebral palsy, which causes abnormally stiff muscles. This condition — the most common type of cerebral palsy — also can cause bone deformities and shortened muscles (contractures). Spastic cerebral palsy is divided into further classifications, depending on which limbs are affected:

- *Diplegia* affects the legs (typically both) more than the arms.
- *Hemiplegia* affects one side of the body.
- *Quadriplegia* affects all four limbs.

#### Athetoid

Injuries to the basal ganglia (area that controls the ability to recall previously learned movement patterns) can result in athetoid cerebral palsy. The condition causes involuntary muscle

movements that often interfere with speaking, feeding, grasping, walking and other skills requiring coordination.

#### Dystonia

Injuries to the basal ganglia also can result in dystonia, which causes fluctuating muscle tone. Although tone is sometimes low, it increases when a person attempts to move or experiences heightened emotions.

#### Ataxic

Injuries to the cerebellum (area that maintains coordination during movements) can result in ataxic cerebral palsy. The condition causes poor coordination, which in turn affects balance, posture, walking and motor tasks.

#### Mixed

Injuries to multiple brain areas — usually the cerebral cortex and basal ganglia — can result in more than one kind of abnormal muscle tone. For example, someone could have spasticity and dystonia.

By identifying what type(s) of cerebral palsy a child has, doctors and therapists can recommend treatments and give families a better idea of what a child’s future might hold. Some potential problems can be prevented or corrected if addressed early in a child’s life.

## Our Services

The Center for Cerebral Palsy provides many forms of care. We recommend services based on the cause and type of brain damage present and on any resulting disabilities. Then we coordinate intervention plans.

### Assistive Technology

The Center for Cerebral Palsy staff and our on-site assistive-technology specialists work together to provide equipment that helps manage muscle tone and foster independence.

### Developmental Assessments

Our specialists gauge various abilities in our patients. We monitor progress in sensory abilities and in motor, cognitive and planning skills.

### Intrathecal Baclofen Pump Implantation

In this procedure, a surgeon implants a pump under the skin of a person's abdomen. The pump dispenses baclofen, a muscle relaxant, into the intrathecal space surrounding the spinal cord. The baclofen can last for several months. Refills and dose adjustments don't require additional surgery.

### Medications

Medications can partially compensate for a lack of normal signals between the brain and the muscles. Although some patients take oral medications, Gillette often recommends injected medications, such as botulinum toxin. We administer it directly into spastic muscles.



*James Gage, M.D., medical director of Gillette's Center for Cerebral Palsy, evaluates the movement patterns of patients before and after treatment. As a result of selective dorsal rhizotomy surgery to reduce spasticity, Kalli's ability to walk improved significantly.*

### Motion Analysis

Our specialists use state-of-the-art computer and video technology to analyze how a person's muscles, joints and nerves work together. For more information on motion analysis, see page 17.

### Orthopaedics

Our specialists identify treatments for muscle contractures and bone deformities in the legs and feet. Many children who have cerebral palsy also experience such complications as arm or hand deformities and scoliosis (an abnormal curvature of the spine).

### Rehabilitation Therapies

Physical therapy, occupational therapy and therapeutic-recreation activities promote physical activity and increase the range of motion in patients' joints.

### Shunt Implantation

Some people with cerebral palsy develop hydrocephalus, an abnormal buildup of spinal fluid in the brain. Gillette neurosurgeons implant shunts to drain the excess fluid into the abdomen, where the body can effectively manage it.

### Surgery

For select patients, orthopaedic surgery, neurosurgery and/or selective dorsal rhizotomy surgery are appropriate parts of treatment plans.

### Specialty Clinic

Within the Center for Cerebral Palsy is the spasticity evaluation clinic.

### Spasticity Evaluation Clinic

Physicians coordinate evaluations to assess how abnormal tone affects a person's daily functions. The evaluations also incorporate input from motion-analysis specialists, physical therapists and social workers.

### For More Information

To learn more about:

- Our patient services, see page 31.
- Gillette's Center for Cerebral Palsy and our spasticity evaluation clinic, go to [www.gillettechildrens.org](http://www.gillettechildrens.org) and click on Programs and Services. Or call 651-290-8712 or 800-719-4040 (toll-free).
- How injuries affect the brain, go to [www.gillettechildrens.org](http://www.gillettechildrens.org) and click on Resource Center, Interactive Features and Brain Map.

*On our Web site, Gillette's interactive Brain Map shows what the brain does — and how injuries affect it.*





Center of Excellence

## Center for Craniofacial Services

Gillette's Center for Craniofacial Services treats children who have craniofacial anomalies that are present at birth or that result from trauma. If a craniofacial condition is diagnosed before birth, we can consult with a family before the baby is born. Otherwise, we might meet with a family before the newborn leaves the hospital.

Craniofacial abnormalities involve the skull and upper face. Children with such conditions sometimes require several medical services, including neurosurgery, dental care, nursing, plastic surgery, rehabilitation therapy, psychological care and assistive technology.

Our craniofacial team uses the most advanced techniques available to treat children with:

- Cleft lip and /or palate (incomplete closing of the lip or roof of the mouth)
- Congenital nevi (moles present at or developing shortly after birth)
- Craniosynostosis (restricted or uneven growth of the skull)
- Deformational plagiocephaly (misshapen head)
- Facial paralysis (resulting from tumors, trauma or congenital causes)
- Hemangiomas and vascular malformations (sometimes called port-wine stains and strawberry marks)
- Hemifacial microsomia (asymmetric growth of the face)
- Microtia (abnormal growth or absence of one or both ears)
- Post-traumatic deformities (such as facial fractures)
- Torticollis (a tightening of the neck muscle on one side)



*Kathy Molina, certified orthotist, fits Gillette CranioCap® orthoses for Mason and Madison. The twins needed treatment to correct deformational plagiocephaly.*

We believe that caring for a child with a craniofacial abnormality means more than addressing a medical condition. In addition to improving a child's health and physical appearance, we strive to promote self-esteem.

### Our Services

Gillette offers services that address a variety of craniofacial conditions. Our team of experts diagnoses and treats children with craniofacial anomalies.

### Gillette's CranioCap® Orthosis

A custom-made helmet for the skull, this orthosis corrects skull deformities in infants resulting from deformational plagiocephaly. We provide on-site fittings for the orthoses.

### Distraction Osteogenesis (Bone Lengthening)

Doctors use this surgical approach to treat children whose faces develop abnormally. Distraction osteogenesis enables our surgeons to reconstruct the face using a patient's own bone tissue.

### Endoscopic Plastic Surgery/Plastic Surgery

We perform various operations to restore or improve appearance. Endoscopic surgery removes facial growths, such as cysts, from under the skin — without leaving facial scars.

### Lactation Consultations

Infants who have clefts often have difficulty breast- and bottle-feeding. Our certified lactation consultants support and guide parents or other caregivers as they learn special techniques for feeding their babies.

### Laser Therapy

We use a long-pulse laser to remove vascular malformations. Our long-pulse laser penetrates the skin and larger blood vessels better than traditional lasers do, enabling us to remove vascular lesions more completely. We also use the Alexandrite laser, which removes pigmented marks (such as moles).

### Physical Therapy

We provide physical therapy for patients who have torticollis (sometimes called wry neck). Torticollis maintains the head in one position. Without therapy, infants with the condition could develop deformational plagiocephaly, in which the head becomes misshapen.

### Presurgical Cleft Treatments

Custom made by orthodontists, Gillette's OrthoCleft Retainer™:

- Brings a child's gum segments together
- Reduces the size of the gap in the mouth
- Stretches the lip muscles and tissue
- Gives the nose a more even shape

### Psychology Services

Our psychology services include counseling. For example, we help parents deal with the physical and psychological aspects of having a child with a craniofacial condition.

### Speech and Language Therapy

We help infants who have clefts — and their families — address feeding issues and develop speech and language skills.

### Tissue-Expansion Procedures

We use tissue expanders in preparation for removing medium or giant congenital nevi, for complex scarring, and for aplasia cutis (the absence of a portion of skin).

### For More Information

To learn more about:

- Our patient services, see page 31.
- Gillette's Center for Craniofacial Services, go to [www.gillettechildrens.org](http://www.gillettechildrens.org) and click on Programs and Services. Or call 651-325-2308 or 800-719-4040 (toll-free).



Center of Excellence

## Center for Gait and Motion Analysis

Gillette's Center for Gait and Motion Analysis uses advanced technology to analyze how muscles, joints and nerves make movement possible. With X-rays, patients' medical histories and the results of other evaluations, motion analysis helps doctors recommend treatments for abnormal movement.

We see people who have:

- Amputations
- Arthritis
- Brain injuries
- Cerebral palsy
- Conditions that cause toe-walking
- Foot deformities
- Limb-length discrepancies
- Movement problems of the arms and hands
- Spina bifida

We also care for patients with other neurological or orthopaedic conditions.

### Our Services

During motion analysis, several cameras capture the movement of sensors attached to a patient's body. A computer then constructs an animated, three-dimensional representation of a patient's movement patterns.

We assess a patient's strength, range of motion, level of spasticity, and muscle control. We measure oxygen intake and carbon-dioxide expulsion to determine how much energy patients expend while walking. After the tests, we graph patients' movements, muscle activity, force production and energy use. Our physical therapists and orthopaedic surgeons then analyze the data and recommend treatments.

When our Center for Gait and Motion Analysis opened in 1987, it was the only one of its kind in the Upper Midwest. Our doctors were



*Charlie, who has cerebral palsy, prepares for motion-analysis testing with Sue Sohrweide, physical therapist. Motion-analysis testing helps physicians understand and treat movement problems.*

among the first in the world to use motion analysis to treat children with movement problems. Today, we operate the busiest clinical motion-analysis laboratory in the nation.

### For More Information

To learn more about:

- Our patient services, see page 31.
- Gillette's Center for Gait and Motion Analysis, go to [www.gillettechildrens.org](http://www.gillettechildrens.org) and click on Programs and Services. Or call 651-229-3868 or 800-719-4040 (toll-free).
- Case studies of patients, visit our Web site and follow the link under Motion Analysis.



Center of Excellence

## Center for Pediatric Neurosciences

Gillette's Center for Pediatric Neurosciences is the first such center in Minnesota and one of only a few in the United States. The center serves patients with neurological complications related to brain injuries, spinal-cord injuries and cerebral palsy. In addition, we see patients with:

- Charcot-Marie-Tooth disease (an inherited nerve disorder characterized by loss of muscle tissue and sense of touch)
- Dermatomyositis (a rheumatic disease in which the blood vessels are inflamed, damaging muscle tissue)
- Epilepsy (a disorder of the brain that results in recurrent seizures)
- Metabolic myopathies (diseases that cause skeletal muscle to weaken or shrink)
- Muscular dystrophy (a disorder causing weak muscles)
- Neurocutaneous disorders (genetic conditions that cause tumors or lesions)
- Peripheral neuropathies (damage to nerves of the peripheral nervous system)
- Spinal muscular atrophy (a degenerative problem of the spinal cord and nerves that results in muscle weakness)

### Diagnostic Testing

Various tests help our teams diagnose conditions, establish a patient's baseline status, and monitor a patient's condition. Depending on their needs, patients might undergo:

- Blood and urine analyses
- Echocardiograms and electrocardiograms
- Electromyogram (EMG) and electroencephalogram (EEG) tests
- Genetic tests
- Muscle and nerve biopsies
- Pulmonary-function tests

- Swallowing studies
- Strength, range-of-motion, and functional-mobility tests

EEGs help pinpoint the source of seizures; EMGs assess patients' nerve and muscle functions. We use a video camera to record the physical manifestations that can accompany seizures.

### Our Services

Our patients often have neurological and musculoskeletal problems that require management by several medical specialists. Treatment sometimes reduces the intensity and slows the progression of symptoms, such as muscle contractures, joint deformities and loss of function. Treatments might include:



*Our neurosurgeons implant vagal-nerve stimulators to minimize seizures in some children who have epilepsy. Following Tyler's surgery, Beverly Wical, M.D., medical director for epilepsy services, adjusted the stimulator's signals using a programming wand.*

- Assistive technology
- Medication
- Neuropsychology services
- Occupational therapy
- Physical therapy
- Sleep-disorder management services

### Specialty Clinics

Within the Center for Pediatric Neurosciences, we offer three specialty clinics. They provide care related to specific conditions.

#### Neuromuscular Clinic

Patients who have conditions such as muscular dystrophy or spinal muscular atrophy receive care in Gillette’s neuromuscular clinic. We offer assessments and treatments to help diagnose and manage problems associated with neuromuscular diseases.

#### Epilepsy Clinic

Our epilepsy clinic treats children who have epilepsy and underlying conditions that affect their seizures. Our team of specialists works collaboratively to find the cause of a child’s problems.

Once a diagnosis is made, we offer various treatments. They include the newest antiepileptic medications, the vagal-nerve stimulator — an implanted device that sends electrical pulses to the vagus nerve in the neck — and the highly specialized ketogenic diet. Gillette is one of the few Minnesota health-care organizations to treat children with such a diet.

#### Neurocutaneous Syndromes Clinic

Neurocutaneous syndromes are lifelong genetic conditions that might cause tumors or lesions in the skin, brain, spine and peripheral nerves. The complex disorders affect each person differently, causing a multitude of symptoms.

Our multidisciplinary clinic team includes specialists from Gillette, Children’s Hospitals and Clinics of Minnesota,



*Stephen Smith, M.D., tests Danica’s reflexes during an appointment in Gillette’s neuromuscular clinic.*

and other community providers. After an initial evaluation with a pediatric nurse practitioner or medical geneticist from our clinic, we refer patients to the specialists who can best serve their needs. We help families and primary-care providers navigate the complex treatment options available for neurocutaneous syndromes.

### For More Information

To learn more about:

- Our patient services, see page 31.
- Gillette’s Center for Pediatric Neurosciences and epilepsy clinic, go to [www.gillettechildrens.org](http://www.gillettechildrens.org) and click on Programs and Services. Or call 651-229-1717 or 800-719-4040 (toll-free).
- Gillette’s neuromuscular clinic, go to [www.gillettechildrens.org](http://www.gillettechildrens.org) and click on Programs and Services. Or call 651-312-3176 or 800-719-4040 (toll-free).
- The neurocutaneous syndromes clinic, call 651-229-1758 or 800-719-4040 (toll-free).



## Center of Excellence

# Center for Pediatric Orthopaedics

Gillette's Center for Pediatric Orthopaedics is one of our busiest centers of care. Our pediatric orthopaedists treat orthopaedic complications that result from cerebral palsy, congenital conditions, traumatic brain injuries, neuromuscular conditions, stroke, trauma-related fractures, and sports-related injuries.

### Our Services

Our Center for Pediatric Orthopaedics provides treatments for orthopaedic conditions.

#### Hip Treatments

Our orthopaedic surgeons treat a wide variety of hip abnormalities. We see patients with developmental dysplasia of the hip (the hip joint develops abnormally), slipped capital femoral epiphysis (the ball at the upper end of the femur slips backward because the growth plate is weak), and Legg-Calvé-Perthes disease (the head of the femur deteriorates because of insufficient blood supply). We also see patients who have joint disease, joint-overuse symptoms, and other acute and degenerative musculoskeletal conditions.

Treatment options for children who have hip problems might include monitoring, bed rest, traction, orthoses, casts and surgery.

#### Upper- and Lower-Extremity Treatments

Gillette's pediatric orthopaedists specialize in treating upper- and lower-extremity conditions. These conditions include permanent joint contractures, extra or missing fingers or toes,

brittle-bone disease (osteogenesis imperfecta), Sprengel's deformity (elevation of the scapula), and clubfoot. We also treat torsional and angular abnormalities, orthopaedic complications resulting from neuromuscular conditions, and orthopaedic complications related to growth and development (such as dwarfism and overgrowth).

Candidates for hand and arm splints include patients with thumb-in-palm deformities and patients whose contractures keep them from extending their wrists. Ankle-foot orthoses support the ankle, hold the foot and ankle in the correct position, and correct foot-drop.

#### Spine Treatments

Our orthopaedic surgeons treat children with idiopathic, congenital, neuromuscular and other spine disorders. Treatments include regular evaluations, orthoses and surgery. Our physicians have revolutionized many treatments for spine disorders. We developed effective spinal orthoses and surgical techniques that reduce patients' hospitalization and recovery times.

#### Limb-Length Treatments

Our orthopaedists treat patients with complex leg- and arm-length discrepancies. Using advanced surgical and distraction techniques, we treat both congenital discrepancies and deformities related to trauma or growth-plate injuries.

Our techniques include conventional orthopaedic surgery and the Ilizarov method, a minimally invasive procedure in which surgeons make a small incision to fracture the bone. An external fixator — a system of pins, rods and clamps — keeps the bone segments in place and gradually increases the distance between them. As the segments separate, the body grows new bone tissue.

### Artificial Limbs

We create prostheses for people who were born without an arm or leg, have lost a limb to a disease or an accident, or have a muscular or skeletal disability.

### Specialty Clinic

Within the Center for Pediatric Orthopaedics is Gillette's brachial plexus clinic.

### Brachial Plexus Clinic

The brachial plexus is a network of nerves that conducts signals from the spine to the shoulders, arms and hands. When the nerves are damaged — often when a baby's neck and shoulders are stretched too far during birth — brachial plexus injuries occur.

Physical and occupational therapy successfully corrects the condition in most cases. When surgery is necessary, we might implant nerve guides — also known as NeuraGen tubes. We also perform nerve grafts and neurolysis (destruction of the nerve tissue).

### For More Information

To learn more about:

- Our patient services, see page 31.
- Gillette's Center for Pediatric Orthopaedics and our brachial plexus clinic, go to [www.gillettechildrens.org](http://www.gillettechildrens.org) and click on Programs and Services. Or call 651-229-1758 or 800-719-4040 (toll-free).



*Steven Koop, M.D., Gillette's medical director, treats children who have scoliosis and other orthopaedic problems. After two spinal-fusion surgeries, Amber can play tennis and join her friends in most activities.*



*Jaslyn experienced a brachial plexus injury at birth. As a patient in Gillette's brachial plexus clinic, she received physical and occupational therapies to improve her range of motion and to encourage use of her injured arm.*



Center of Excellence

## Center for Pediatric Rehabilitation

Gillette's Center for Pediatric Rehabilitation offers inpatient and outpatient rehabilitation programs for children and teens who sustain brain and spinal-cord injuries. We also see patients who need comprehensive care for such issues as burns or amputations. In addition, we see children who need long-term ventilation to breathe. Ours is the largest pediatric rehabilitation program in the region.

### Brain Injuries

Children who sustain brain injuries experience a variety of problems. The extent and severity of issues differs, depending on the injury. Typical problems include:

- Motor disabilities
- Difficulty with short-term memory
- Difficulty learning new things and paying attention
- Difficulty with abstract thinking
- A tendency to act on impulse
- Poor judgment

### Spinal-Cord Injuries

Spinal-cord injuries can cause paralysis, affect the nerves and muscles, and result in bowel, bladder and skin problems. Children who experience spinal-cord injuries often have:

- Breathing problems
- Muscle weakness
- Loss of voluntary muscle movements in the chest, arms or legs
- Loss of bowel and bladder function
- Loss of feeling in the chest, arms or legs

### Our Services

Specialized rehabilitation is critical to helping patients reach their greatest level of independence and well-being. Gillette provides rehabilitation services to help patients regain skills or compensate for their injuries.



*Patty Malone, physical therapist, helps Katie develop her balance and gross-motor skills. Katie came to Gillette for inpatient rehabilitation after sustaining a brain injury in an auto accident.*

### Inpatient Rehabilitation

We admit children to our program as soon as they're medically stable. We accept children who have nasogastric tubes, who have tracheostomies, or who breathe with the help of a ventilator.

Our inpatient program focuses on comprehensive evaluations and acute rehabilitation services. Children admitted to our inpatient rehabilitation program can continue going to school during their hospital stays (see page 33 for more information). We also help patients and their families prepare to return to their homes and communities.

The Commission for Accreditation of Rehabilitation Facilities certifies Gillette's inpatient rehabilitation program, one of only three such accredited pediatric programs in the five-state area. In addition, many Gillette rehabilitation nurses have earned certification from the Association of Rehabilitation Nurses.

### Outpatient Rehabilitation

Ongoing evaluations and rehabilitation services are critical as children grow, especially if they begin to demonstrate deficits caused by brain injuries. Gillette offers such services for as long as children need them. While teaching children skills to promote self-sufficiency, we also work with parents and caregivers to enhance a child's independence.



*Anna Nettleton, occupational therapist, helps patients like Kelavonte use adaptive equipment to improve their independence. Kelavonte spent several months at Gillette following a spinal-cord injury.*

### For More Information

To learn more about:

- Our patient services, see page 31.
- Gillette's Center for Pediatric Rehabilitation, go to [www.gillettechildrens.org](http://www.gillettechildrens.org) and click on Programs and Services. Or call 651-229-3915 or 800-719-4040 (toll-free).
- How brain and spinal-cord injuries affect the body, go to [www.gillettechildrens.org](http://www.gillettechildrens.org) and click on Resource Center, Interactive Features, and Brain Map or Spinal-Cord Map.



Center of Excellence

## Center for Pediatric Rheumatology

Gillette's Center for Pediatric Rheumatology focuses on health care for children who have a broad range of rheumatic and related inflammatory conditions. They include juvenile rheumatoid arthritis, lupus, scleroderma and spondyloarthropathy.

### Our Services

Each year, more than 300 new patients undergo comprehensive evaluations to help diagnose and treat their conditions. Our goal is to allow patients to develop physically and emotionally while learning to manage their conditions.

### Assistive Technology

Shoe inserts, orthoses or splints support inflamed joints and prevent joint malalignment.

### Child and Family Services

The impact of rheumatic conditions extends beyond the joints. Our specialists team with parents, siblings and, often, teachers to minimize the condition's effects and provide support for the entire family.

### Medications

To help control symptoms and relieve pain, we offer anti-inflammatory, immune-suppressive and intravenous medications.

### Rehabilitation Therapies

Physical therapy, occupational therapy and therapeutic-recreation activities promote physical activity and increase the range of motion in patients' joints.

### For More Information

To learn more about:

- Our patient services, see page 31.
- Gillette's Center for Pediatric Rheumatology, go to [www.gillettechildrens.org](http://www.gillettechildrens.org) and click on Programs and Services. Or call 651-229-3839 or 800-719-4040 (toll-free).



Children like Lily, who have juvenile rheumatoid arthritis, can benefit from aquatic therapy (see page 31). Patty Malone, a physical therapist, works with Lily to improve her strength and gross-motor skills.



Center of Excellence

## Center for Spina Bifida

Spina bifida occurs when the spinal cord, surrounding nerves and/or spinal column fail to develop normally during the first 28 days of gestation. The condition often causes paralysis and other complications below the affected area on the spine. Gillette's Center for Spina Bifida is the largest spina bifida program in the Upper Midwest.

Forms of spina bifida are open spina bifida (also called myelomeningocele) and spina bifida occulta, including spinal lipoma and simple tethered-cord or split-cord malformations. People who have spina bifida can experience a wide range of medical complications, including:

- Allergic reactions caused by prolonged exposure to latex
- Bladder, bowel and kidney problems
- Eye problems
- Fractures, scoliosis and other orthopaedic problems
- Hydrocephalus (excess fluid on the brain)
- Learning disabilities that affect concentration and organizational skills
- Seizures
- Skin problems
- Sleep disorders
- Tethered spinal cord
- The Chiari malformation (a condition in which the cerebellum portion of the brain protrudes into the spinal canal)
- Weight gain or obesity

Gillette provides care for all such associated conditions. We help patients manage all types of spina bifida.



*Robin McDonald, physical therapist, offers games and other activities to help patients like Dennis improve their range of motion.*

### Our Services

The effects of spina bifida require lifelong management and care. We typically begin seeing our patients when they're infants and continue providing age-appropriate care throughout their lifetimes. As our patients approach adulthood, we support families in discussing a patient's independence and transition to adult-focused health care.

### For More Information

To learn more about:

- Our patient services, see page 31.
- Gillette's Center for Spina Bifida, go to [www.gillettechildrens.org](http://www.gillettechildrens.org) and click on Programs and Services. Or call 651-229-3878 or 800-719-4040 (toll-free).



*Adult patients at Gillette Lifetime Specialty Healthcare benefit from the same multidisciplinary approach to care that has been our hallmark for more than 100 years. Isaiah sees Paul Lemke, seating specialist; Becky Schauer, registered nurse; and Rebecca Koerner, M.D., for problems associated with spina bifida.*

## Our Services for Adults

**G**illette Lifetime Specialty Healthcare provides medical services for people age 16 and older who have disabilities. The clinic provides access to a team of experienced specialists who understand the health-care concerns of teens and adults who were diagnosed during childhood with conditions that limit their abilities.

Our adult patients — or their caregivers — know their needs better than anyone else does. That's why patients and caregivers take part in choosing the most appropriate types of specialized health care. Through therapies, medicine, surgery, assistive technology and other treatments, we strive to improve our patients' quality of life.

### Our Services

At Gillette Lifetime, patients benefit from treatments for specialty medical needs. Our physical medicine and rehabilitation physicians, internal medicine/pediatric physicians, nurse practitioners, urologists, neurologists, surgeons, neurosurgeons and registered nurses provide and coordinate care.

### Adaptive Equipment

We offer our patients a variety of adaptive equipment, including customized seating, alternative-communication devices and computer-access controls.

### Physical Therapy

We use standing and gait-training equipment to help patients develop gross-motor skills and a sense of balance. We also help our patients establish fitness plans.

### Radiology

Our equipment is designed to improve comfort for adults who have disabilities and need X-rays.

### Social Work

Our social workers address patients' social and emotional needs. We coordinate our services with community resources and help patients move from pediatric to adult-focused care.

### For More Information

To learn more about:

- Our patient services, see page 31.
- Gillette Lifetime, go to [www.gillettechildrens.org](http://www.gillettechildrens.org) and click on Programs and Services. Or call 651-634-1920 or 800-578-4266 (toll-free).

Joe, age 20



# Our Inpatient Units

Each of Gillette's inpatient units is designed to meet the specific health-care needs of particular groups of patients. The nursing staff on each unit specializes in the medical needs of its respective patients. Our inpatients have access to all of our programs and services.

## **Pediatric Medical Trauma Unit (4-South)**

This area serves patients who are hospitalized for:

- Baclofen-pump revisions
- Craniofacial surgery
- Infusions requiring short-term stays
- Neurosurgery
- Pediatric surgery
- Pressure sores
- Trauma that doesn't require intensive-care services
- Urology surgery

Patients with sepsis, pneumonia, feeding problems and endocrine issues also receive care on this unit. So do neurology patients who have additional medical issues.

## **Postsurgical Nursing Unit (4-West)**

This area serves patients who are hospitalized for cast removal, physical therapy and orthopaedic surgery.

## **Rehabilitation and Neurology Unit (4-North)**

This unit serves patients who are hospitalized for:

- Traumatic and acquired brain injuries
- Spinal-cord injuries
- Comprehensive medical rehabilitation
- Selective dorsal rhizotomy surgery
- Baclofen pump implantation
- Epilepsy monitoring and treatments
- Ventilator support

## **Pediatric Intensive Care Unit (PICU)**

Our PICU serves patients who need critical-care services. It's also readily available if children in our other units require intensive care during their hospital stays.

## **Adult Inpatient Unit (4-East)**

This unit serves adult patients who are hospitalized for procedures — including surgery — to manage chronic conditions.

## **Outpatient Procedure Unit (4-East)**

Our 4-East unit cares for children undergoing lengthy outpatient procedures. We also perform EMG and video EEG tests and give injections of botulinum toxin here.

## **For More Information**

To learn more about:

- Our patient services, see page 31.
- Gillette's inpatient units, call 651-291-2848 or 800-719-4040 (toll-free).



*Tammy Sinkfield, registered nurse, says she enjoys getting to know the children on her unit. Nicole spent several weeks at Gillette following selective dorsal rhizotomy surgery.*



*Laster Logan, casting technician, made Claire a cast to correct an orthopaedic complication resulting from cerebral palsy.*

## Our Patient Services

**G**illette offers many services tailored to address our patients' diagnoses.

### Aquatic Therapy

Our St. Paul and Burnsville locations offer aquatic therapy for patients who have neurological and musculoskeletal problems. The buoyancy of water makes movement easier, assists with exercise, and helps patients gain the strength to initiate limb and body movement.

### Assistive Technology

Our certified assistive-technology specialists identify, design and help people obtain access to equipment for managing muscle tone and fostering independence.

- **Orthotics** — Our certified orthotists provide customized orthoses, splints and footwear to improve mobility and relieve discomfort. We customize orthoses on-site, allowing patients to begin treatment quickly and to coordinate their fittings and adjustments with physician appointments.
- **Prosthetics** — Our prosthetists design and fit artificial limbs (prostheses) for people who were born without an arm or leg, have lost a limb to a disease or an accident, or have a muscular or skeletal disability.
- **Rehabilitation Engineering** — Our rehabilitation engineers consult with therapists — at Gillette and in the community — on augmentative- and alternative-communication devices,



*George Gent, certified orthotist, fits Elijah with an ankle-foot orthosis to help correct a foot deformity.*

computer-access methods, electronic aids to daily living, and powered-mobility equipment.

- **Seating** — Our certified seating specialists customize seating equipment for patients who use wheelchairs. With proper head and trunk support, patients are better positioned to participate in activities and minimize pressure sores.

### Care Coordination

Our care coordinators help patients and their families coordinate physician appointments, therapy appointments and other services.

### Casting

Our casting technicians provide casts for patients with acute orthopaedic and post-surgical needs. They also replace and apply



*Liz Jensen, a child life specialist, helps Whitney learn more about her medical services by practicing injections on a doll.*



*Laurie Porter, Family Resource Center coordinator, helps Shalom and his family access information about disabilities on the Internet.*

sequential casts. We use a variety of techniques, including the Ponsetti method — a nonsurgical casting process used to treat clubfoot.

### Chaplaincy

Our chaplains provide spiritual and emotional support to patients and their families. We offer guidance regarding medical decisions and help address issues related to grief.

### Child Life

Our child life specialists use therapeutic play, educational materials and hospital tours to help patients and families cope with — and better understand — medical procedures and hospital stays. We also provide pain-management assistance, such as guided-imagery and relaxation techniques.

### Family Resource Center

The Family Resource Center offers patients and families an extensive library of books, magazines, pamphlets, videos and other resources. Our computers provide patients and families with Internet access. We also have a selection of games and toys.

### Infant and Toddler Services

We offer infant and toddler services for children, age 3 and younger, whose development is delayed or different from what's expected. We complete interviews and developmental exams to help determine the extent and possible causes of a child's developmental problems. Based on our findings, we work with patients' families and their primary physicians to develop plans for further care.

### In-Hospital Schooling

Through a partnership with St. Paul Public Schools, children in kindergarten through 12th grade can attend school while in the hospital for long stays. Some preschool children qualify for early childhood services at the hospital.

### Mobile Outreach Clinic

Gillette's Mobile Outreach Clinic serves people with disabilities who live in greater Minnesota, where assistive-technology and related services aren't readily available. We offer orthotic and seating services, augmentative- and alternative-communication assessments and training, wheelchair repairs, and recreational equipment.

### Neuropsychology

Our neuropsychologists evaluate children who sustain brain injuries or experience uncontrolled seizures. We help patients develop their organizational, planning and impulse-control skills.

### Nurse Practitioners

Our nurse practitioners see patients of all ages. We assess the needs of patients and develop treatment options. In collaboration with physicians, we provide the necessary care. We also offer education and support to patients and their families.

### Nursing

Our nurses care for patients who have various medical needs. We assess and prioritize those needs and provide the necessary nursing care. We teach patients — and their families — how to manage their illness or injury. We also provide emotional support to patients and their families.



*Teacher Debbie Zenker helps Sabrina with her schoolwork. Offering an in-hospital school lets patients keep up with their studies during long hospital stays.*



*John Fawcett, certified orthotist, adjusts an ankle-foot orthosis for Amy during a Mobile Outreach Clinic visit to Willmar, Minn.*



*Susan Schneider, radiology technician, observes a computed X-ray at a remote viewer.*

### Nutrition

Children who have disabilities often have feeding difficulties, which can affect their growth. Our dietitians assess patients' nutrition and help families plan meals that provide proper nutrients. We collaborate with our therapists to provide equipment that helps position children properly for eating. We also collaborate to teach eating and swallowing skills.

### Occupational Therapy

Our occupational therapists help children improve their ability to perform daily tasks, such as dressing and grooming. We also evaluate patients who might benefit from adaptive equipment, manual and powered wheelchairs, and environmental controls. Our adapted kitchens help patients learn independent-living skills.

### Pain Management

Gillette uses various methods, including complementary therapies, to help patients manage pain and stress.

### Physical Therapy

Our physical therapists help patients improve their gross-motor skills, strength and balance. We recommend, create and customize adaptive equipment, such as powered or manual wheelchairs, walkers, and standers. We have on-site therapy gyms and a variety of fitness equipment.

### Psychology

Our psychologists evaluate children to determine their cognitive abilities, academic skills and psychosocial development. We help families with grief and loss issues, and we work with schools to provide special academic services and behavior-management plans.

### Radiology

At Gillette, we often use radiography as a diagnostic tool. In addition to traditional X-rays, we offer computed radiography, which allows electronic storage and sharing of patient X-rays. Our picture archiving and communication system associates patients' X-rays with their other medical records, enabling physicians to call up images from desktop workstations.

### Respiratory Care

Our respiratory therapists treat infants, children and teens who have acute and chronic respiratory needs. We help maintain optimum cardiopulmonary health by identifying, preventing and treating cardiopulmonary dysfunctions.

### Social Work

Our social workers interview families and caregivers to determine their needs. We then help parents find community resources for services. In addition, we provide educational and emotional support to families and help them coordinate hospital discharge services.

### Speech and Language Therapy

Our speech and language pathologists assess speech, language and swallowing problems. We assess nasal resonance and provide videofluoroscopy evaluations to identify feeding and swallowing problems. We also assess patients for, and provide, augmentative- and alternative-communication devices.

### Therapeutic Recreation

Our therapeutic-recreation specialists assess patients' capabilities and recommend ways to develop healthy leisure lifestyles. We work with community providers to help our patients participate in sports and recreational activities.



*Raymond Tervo, M.D., examines hundreds of patients like Sophia each year to help determine the extent of their developmental delays.*



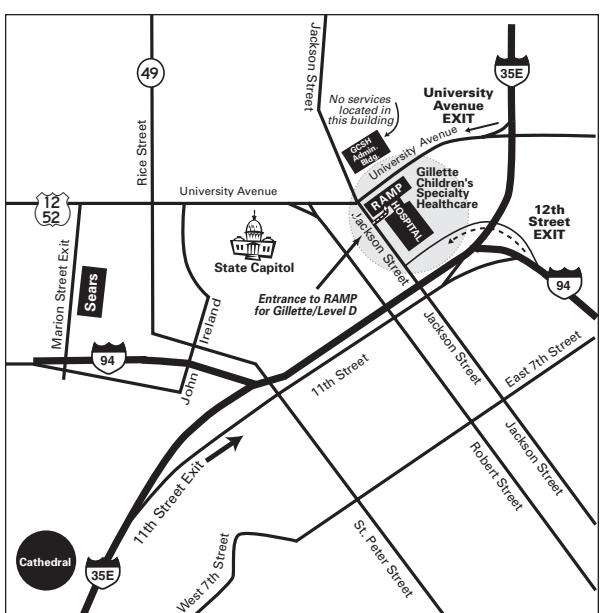
*Rachel and her mom check in at the St. Paul Clinic. In addition to providing care at our main campus, Gillette offers services at three outpatient clinics in the Twin Cities and one in Duluth, Minn.*

# Our Locations

For the convenience of patients, we offer many of our services at multiple locations throughout the metro area.

## St. Paul (Main) Campus

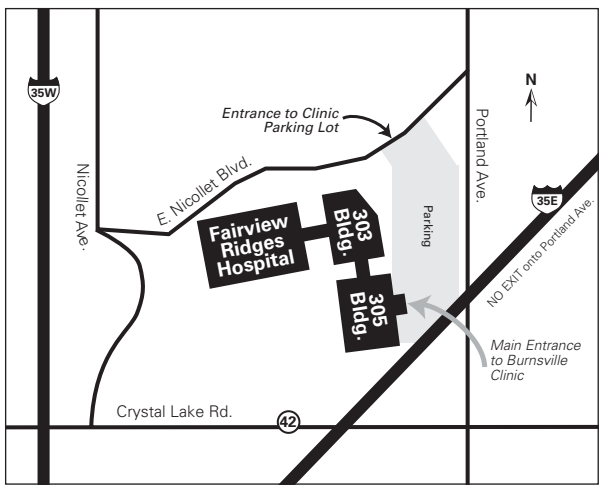
Gillette's main campus in St. Paul, Minn., includes a 60-bed hospital with five specialized inpatient units, including one for adult patients. It also houses our largest outpatient clinic, which serves thousands of patients each year. A complete array of our medical specialties and services is available at this location.



St. Paul (Main) Campus — 200 University Avenue East, St. Paul, Minn.

## Burnsville

The Burnsville Clinic is Gillette's newest and second-largest outpatient facility and therapy center. We have specialists in craniofacial services, neurology, pediatric neurosurgery, pediatric orthopaedics, psychiatry, pediatric rehabilitation medicine and sleep medicine. For children and teens with cerebral palsy and other conditions, our Burnsville Clinic offers casting and assistive-technology services, spasticity evaluations, rehabilitation therapy and psychological counseling.



Burnsville Clinic — 305 East Nicollet Boulevard, Burnsville, Minn.

## Minnetonka

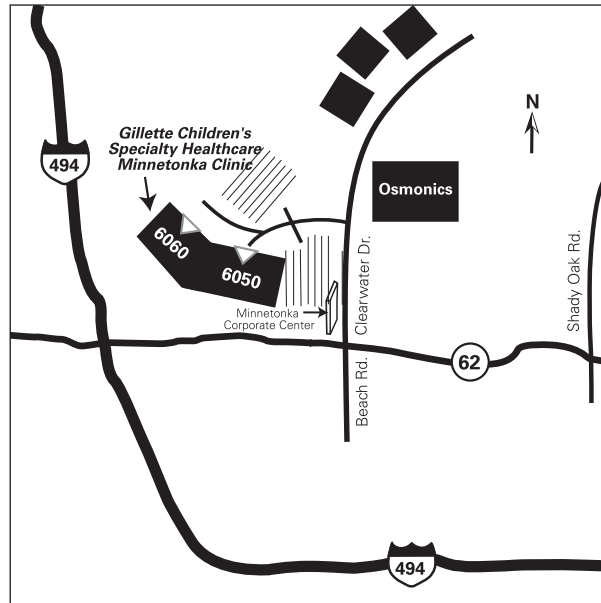
Gillette's Minnetonka Clinic offers services in assistive technology, casting, neurodevelopmental pediatrics, pediatric neurosurgery, pediatric orthopaedics, pediatric rehabilitation medicine, and rehabilitation therapies.

## New Brighton

One part of our New Brighton Clinic is Gillette Lifetime Specialty Healthcare, which treats people 16 and older who have disabilities. Gillette's Mobile Outreach Clinic also is based at the New Brighton Clinic. The Mobile Outreach Clinic brings Gillette services to about 140 clinics in 20 communities throughout greater Minnesota each year.

## Duluth

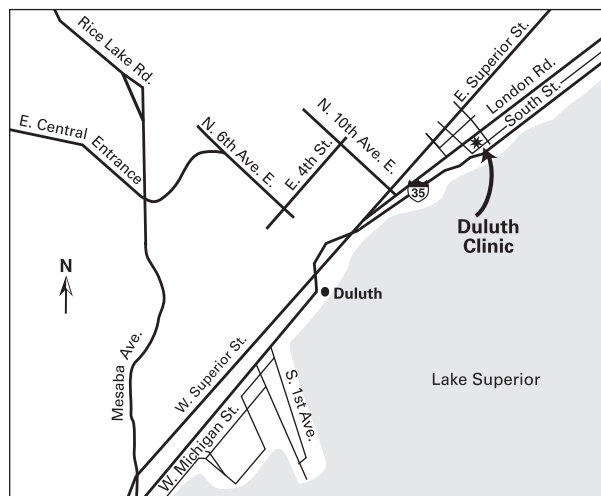
Gillette's Duluth Clinic includes pediatric rehabilitation medicine physicians, orthotists, family-practice nurse practitioners, and registered nurses. We offer outpatient and assistive-technology services.



Minnetonka Clinic — 6060 Clearwater Drive, Minnetonka, Minn.



New Brighton Clinic — 550 County Road D, New Brighton, Minn.



Duluth Clinic — 1420 London Road, Duluth, Minn.





St. Paul (Main) Campus  
200 University Avenue East  
St. Paul, MN 55101  
651-291-2848  
800-719-4040 (toll-free)

Burnsville Clinic  
305 East Nicollet Boulevard  
Burnsville, MN 55337  
952-223-3400  
866-831-7386 (toll-free)

Duluth Clinic  
Lakewalk Center  
1420 London Road  
Duluth, MN 55805  
218-728-6160  
800-903-7111 (toll-free)

Minnetonka Clinic  
6060 Clearwater Drive  
Minnetonka, MN 55343  
952-936-0977  
800-277-1250 (toll-free)



New Brighton Clinic  
550 County Road D  
New Brighton, MN 55112  
651-636-9443  
800-578-4266 (toll-free)

[www.gillettechildrens.org](http://www.gillettechildrens.org)