

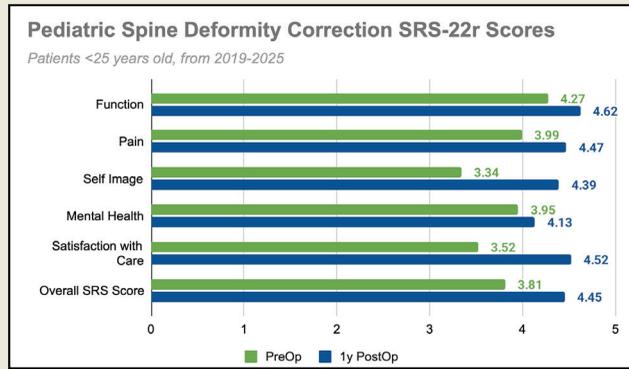
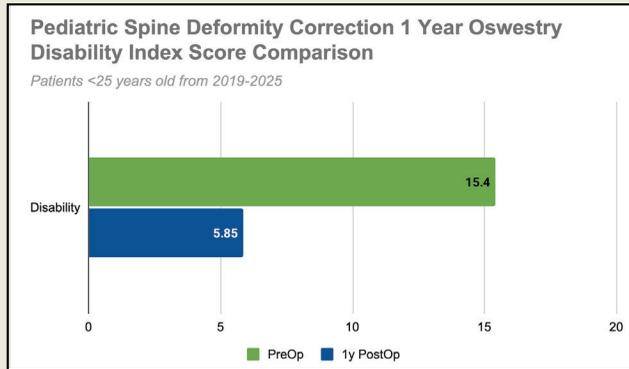
# Clinical outcomes for scoliosis treatment

Clinical outcomes collected at Texas Spine and Scoliosis for pediatric and adolescent scoliosis treatment involves patient forms completed before and after treatment at various intervals. **Patient Reported Outcomes (PRO)** are considered to be the most valid measurement of clinical care related to the patient's assessment of their function, pain level, self image, mental health and satisfaction of the care provided by the clinicians at Texas Spine and Scoliosis. While all patients treated had a significant reduction in spinal curve to reduce damage to internal organs and extend lifespan, these charts document additional "Patient Reported" benefits.

## ASSESSMENT TOOLS USED:

- The OSWESTRY is a standardized spine assessment tool used for 50 years within the spine field that measures a patient's function over a range of activities and compares that to a national database.
- SRS stands for data assembled over decades by the Scoliosis Research Society, the most respected international group of scoliosis specialists.
- The data presented here is collected and aggregated by a clinical outcome data professional within the spine center.

Patients reported that after surgery, their self image improved from 3.21 before surgery to 4.35 out of 5. Patients also reported a reduction in pain, from 3.88 to 4.39 after scoliosis correction, and a 4.5 rating for overall satisfaction with their care. The charts show patient reported improvement in the categories of: FUNCTION, PAIN, SELF IMAGE, MENTAL HEALTH, and SATISFACTION WITH CARE.



*The Setting Scoliosis Straight/Surgeon Performance Project is a quality improvement initiative that came out of Dr. Harry Shufflebarger's work with the Harms Study Group. In this database, surgeons who specialize in pediatric scoliosis enter their patient processes, results, and complications into a database and compare them. This system is designed to promote quality improvement in scoliosis care by providing detailed feedback and benchmarking data. Dr. Geck consistently performs in the top quartile for least EBL per level operated on, most correction, and least major complications. Dr. Geck has been participating in this initiative since its inception in 2019, with yearly and conglomerated data presented here.*

	EBL/Level		% Curve Correction			Length of Stay	2y Major Complication*
	National Rank	Percentile	Dr. Geck vs Peers	National Rank	%		
2019	9th Out of 68	14%	78% vs 70%	20th out of 85	30	3.6 days	0
2020	9th out of 87	10%	74% vs 71%	26th out of 85	30	3.9 days	0
2021	32nd out of 110	29%	77% vs 71%	25th out of 106	24	3.7 days	0
2022	43rd out of 112	38%	77% vs 71%	27th out of 107	25	3.8 days	x1
2023	23rd out of 111	21%	78% vs 71%	21st out of 103	20	3.4 days	0
2024	14th out of 108	13%	80% vs 74%	16th out of 128	15	3.1 days	x1
<b>6 Year Consolidated</b>		<b>Top 21%</b>	<b>77% average correction</b>		<b>Top 20%</b>	<b>3.6 days</b>	<b>0.8% vs 2% benchmark (top third HSSG)</b>

\*Major Complication: Return to OR for deep infection, non-union, fractured rods; any postop neurological deficit including visual loss, proximal or distal junctional failure requiring revision/extension.

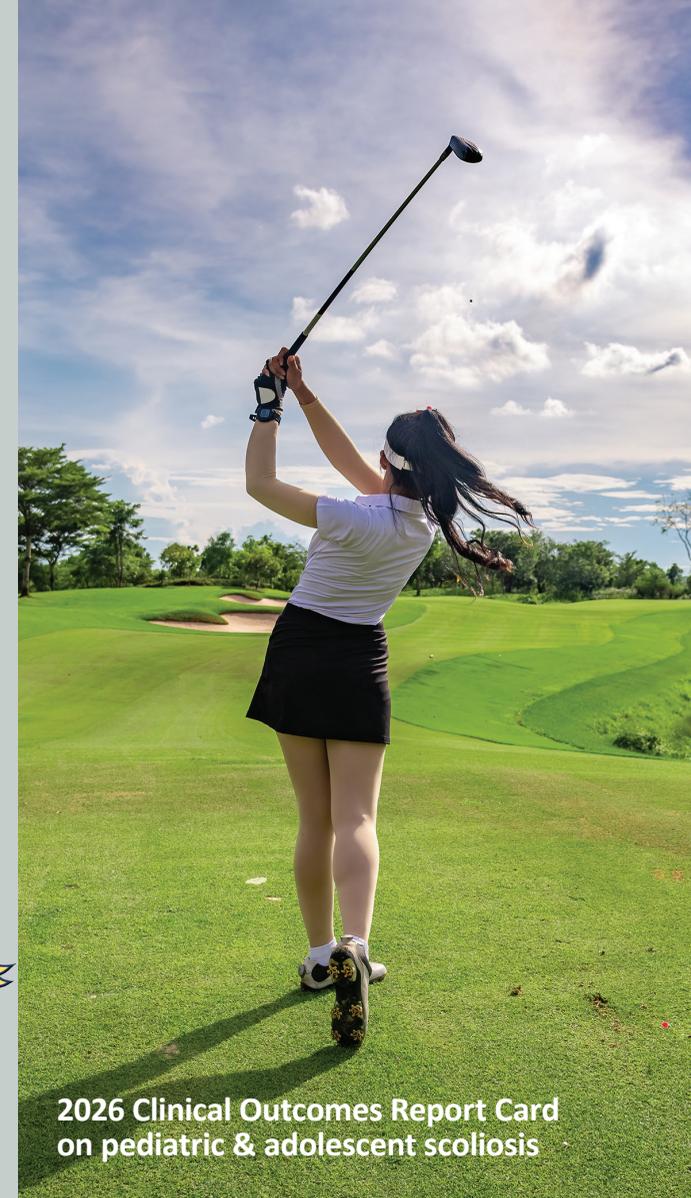


## Texas Spine & Scoliosis: a spine center of excellence for scoliosis and back & neck pain

Texas Spine & Scoliosis is one of only two spine centers in Texas to be included in SpineCenterNetwork.com — the only national listing of credentialed spine centers. To be included, a spine center must have board-certified, fellowship-trained spine surgeons, physical medicine MDs; and an emphasis on non-surgical options. Texas Spine & Scoliosis Center is also designated as a Blue Distinction regional spine center by Blue Cross Blue Shield and by the Joint Commission Disease Specific Care Certification for Spine Surgery. The spine center is also featured on the national site CentersforArtificialDisc.com.



Blue Distinction<sup>®</sup>  
Center  
Spine



2026 Clinical Outcomes Report Card on pediatric & adolescent scoliosis

## Texas Spine & Scoliosis

MAIN OFFICE: 1004 West 32nd Street, Suite 200 • Austin, TX 78705

**Appointments & Referrals: 512-324-3580**

Educational online encyclopedia on spine at: [TexasSpineandScoliosis.com](http://TexasSpineandScoliosis.com)

SATELLITE OFFICES:

**Round Rock:** 201 University Oaks Blvd #1260 Round Rock, TX 78665

**Kyle:** 5103 Kyle Center Drive, Suite 103, Kyle, TX 78640

**Burnet:** 200 John W. Hoover Pkwy, Bldg 3, Burnet, TX 78611

**Bastrop:** 630 State Hwy 71 W Bastrop, TX 78602

**Dripping Springs:** 249 Sportsplex Dr #204, Dripping Springs, TX 78620

Texas Spine & Scoliosis has an online encyclopedia on back and neck pain at [TexasSpineandScoliosis.com](http://TexasSpineandScoliosis.com) with home remedies, exercises and symptom charts. Texas Spine & Scoliosis is the only spine center in Texas to be included in a national listing of credentialed spine centers by SpineCenterNetwork.com.

## Texas Spine & Scoliosis

Capabilities in Pediatric & Adolescent Scoliosis:

How new treatment options like

Vertebral Tethering & Mini Scoliosis Surgery

can correct abnormal spinal curves to help

children and teens return to a normal life

# New treatment options provide hope to children & teens with spinal curves & deformities

Spinal curves associated with scoliosis when left untreated can be debilitating to a person's life. A spinal curve can progress to cause pressure and damage to internal organs like the lungs or heart, shortening one's lifespan. Other times, the curve can create painful back pain symptoms. The key to scoliosis treatment lies in early detection. Unfortunately, most of the time parents are unaware of the curvature in the child's spine until it is detected through a school nurse screening or a routine visit to the pediatrician. Other signs and symptoms of scoliosis begin in adolescence when boys and girls hit their growth spurt. Boys and girls develop mild scoliosis around the same rate, but girls have an increased risk of the scoliosis worsening. Other spinal problems in teen years can be spondylolisthesis associated with gymnastics or cheerleading. Scoliosis treatment involves observation, bracing, and in cases where the curve is worsening, surgery. A back brace may prevent worsening of the spinal curve which may make any necessary corrective surgery less complex. The good news is that the majority of children diagnosed with scoliosis may not need any treatment. Only about one in seven adolescents diagnosed with scoliosis will need bracing or surgery. Early detection is key to prevent a surgery, or make correction surgery less complex.

This brochure provides an overview of the current advances in scoliosis treatment options specific to children and teens that are provided at Texas Spine and Scoliosis spine center in Austin, Texas.



## DETECTING A SPINAL CURVE EARLY

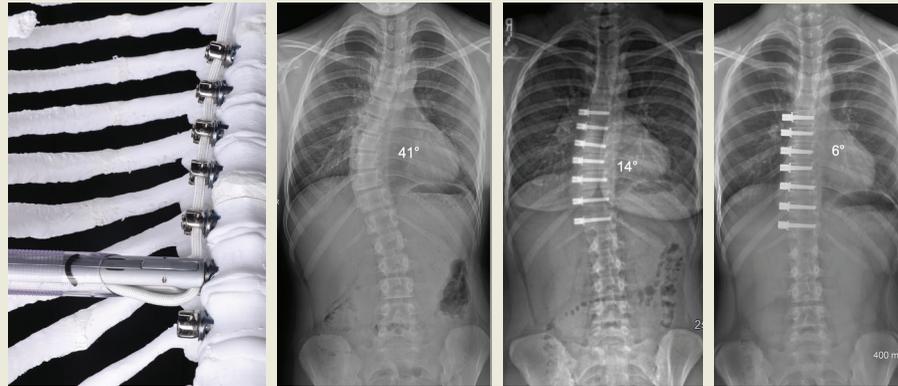
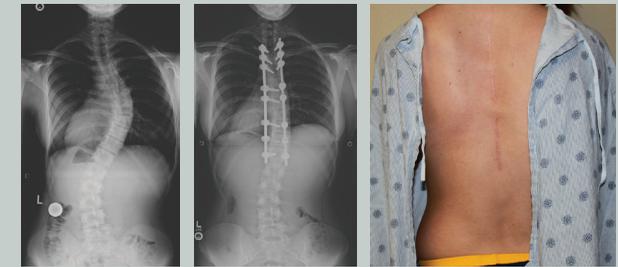
For pediatric scoliosis the earlier the diagnosis, the more effective the treatment. Accordingly, we provide scoliosis screening clinics. Texas Spine and Scoliosis is one of few spine centers in Texas with an EOS slot scanner, which cuts the radiation from a spine X-ray by 90%. School nurses often use Adam's Forward Bend Test which has the child bend over and touch their toes revealing an abnormal spinal curve. Initial treatment for a spinal curve may be a brace which can prevent the curve from worsening. In other cases, scoliosis surgery may be necessary to untwist and correct the spinal curve before it compromises internal organs and causes back symptoms. The key is to detect an abnormal spinal curve early before it worsens and requires more aggressive surgery to correct it.



Dr. Matthew Geck

## New Mini Scoliosis Surgery reduces the length of the incision

Dr. Matthew Geck is one of few scoliosis surgeons in the nation proficient in Mini Scoliosis Surgery which uses the most advanced instrumentation and fixation devices that untwist the spine. Instead of a long 10-inch incision, 3 small incisions are made to access and correct the curve. This greatly reduces disruption to muscles and ligaments, lessens blood loss and speeds return to activity with much less pain in recovery.



## Vertebral Tethering provides a minimally invasive treatment option for teens in their growth years

**Vertebral Body Tethering (VBT)** uses a cable attached to one side of the vertebrae to correct and then control the curve. As the adolescent spine grows the curve straightens further over time. In the X-rays above a 41 degree scoliosis curve is initially straightened to 14 degrees. That after a few years of growth the spine straightens further, reducing the curve to only 6 degrees. Dr. Geck's patient success stories are featured at ScoliosisTexas.com.

## PHYSICIAN BIO

### MATTHEW GECK, MD

Board-certified Orthopedic Surgeon • Fellowship-Trained in Adult and Pediatric Spine Surgery  
Co-Chief, Ascension Texas Spine and Scoliosis Center • Chief, Scoliosis and Complex Spine Program  
Assistant Professor Dell Medical School • Co-Founder, Co-Medical Director of SpineHope

Matthew J. Geck MD is a board-certified, fellowship-trained scoliosis surgeon. Dr. Geck's practice is focused 100% on scoliosis, spondylolisthesis and spinal deformity surgery with an emphasis on pediatric/adolescent scoliosis. His scoliosis practice has been based in Austin since 2002. Over the past 22 years, Dr. Geck has performed over 3,500 scoliosis and deformity surgeries, half of which were pediatric/adolescent patients. His scoliosis practice receives patients from across the Texas region, Mexico and Central America.



Dr. Geck was raised in Wisconsin. He performed his undergraduate work at the University of Wisconsin in the Medical Scholars program and graduated Phi Beta Kappa. He attended medical school at the University of Wisconsin School of Medicine and graduated Alpha Omega Alpha. Dr. Geck performed his orthopedic surgery residency at UCLA Medical Center. He then performed two spine fellowships in adult and pediatric spine surgery, the first at Jackson Memorial Hospital and a second in pediatric scoliosis and kyphosis surgery at Miami Children's Hospital. Dr. Geck has authored more than 100 scientific papers, book chapters, and abstracts. Dr. Geck was certified by the American Board of Orthopaedic Surgery in 2004 and is a Fellow of the American Orthopedic Association, Scoliosis Research Society, North American Spine Society, and American Academy of Orthopedic Surgeons, Society for Minimally Invasive Surgery of the Spine, and the Cervical Spine Research Society. Dr. Geck provides free scoliosis surgery as Medical Director for SpineHope for children in poverty-stricken countries across South America. He has traveled to more than 20 international locations. He has supervised or performed over 300 spine surgeries in these locales, and has seen over 1,000 children with severe or neglected spinal deformities. Through SpineHope, Dr. Geck provides advanced training to local spine surgeons at these hospitals in the specialty of spinal deformity and scoliosis. To learn more about this charitable foundation, visit SpineHope.org.

