
Medical Policy



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***Current Policy Effective Date: 7/1/26**
(See policy history boxes for previous effective dates)

Title: Growing Rods for Scoliosis (e.g., MAGEC Spinal Bracing and Distraction System)

Description

Growing rods are temporary, surgically implanted medical devices used to treat severe early-onset scoliosis in children who are still growing. By anchoring to the spine above and below the curve, they stabilize the deformity while allowing the spine and chest to continue growing.

Medical Policy Statement

Growing rods in the treatment of early onset scoliosis is established when criteria are met.

Inclusionary and Exclusionary Guidelines

Inclusions:

Use of FDA approved growing rods in the treatment of early onset scoliosis when **all** of the following are met:

- Skeletal immaturity with significant growth remaining (e.g., age less than 10 years),
- Thoracic spine height less than 22 cm,
- Curve greater than 30° despite compliance with bracing or intolerance to brace use,
- Associated with or at risk of Thoracic Insufficiency Syndrome (TIS)*

*TIS is defined as the inability of the thorax to support normal respiration or lung growth.

Exclusions:

- When the above criteria are not met.
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CPT/HCPCS Level II Codes *(Note: The inclusion of a code in this list is not a guarantee of coverage. Please refer to the medical policy statement to determine the status of a given procedure.)*

Established codes:

22899

Other codes (investigational, not medically necessary, etc.):

N/A

Note: Individual policy criteria determine the coverage status of the CPT/HCPCS code(s) on this policy. Codes listed in this policy may have different coverage positions (such as established or experimental/investigational) in other medical policies.

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Background

Scoliosis

Spinal deformities result from an abnormal formation or alignment of the vertebral column. Scoliosis is a common musculoskeletal disorder characterized by abnormal lateral curvature of the spine measuring more than 10° in the coronal plane. The spinal curvature may develop in a single curve or as two curves. The several types of scoliosis that are characterized by age of onset, etiology, severity, and type of spinal curve. Adolescent idiopathic scoliosis (AIS) is the most prevalent form of scoliosis, affecting approximately 0.5% to 5% of children in the United States, accounting for 80% to 85% of all scoliosis cases. In children and teens, scoliosis often does not cause any noticeable symptoms and may not be apparent until it has progressed significantly.

Management

Treatment depends on a variety of factors, including, but not limited to, etiology, severity of the spinal curve, curve pattern, and remaining growth of the patient. Traditional conservative treatment for scoliosis involves observation and/or use of a supportive brace, which is recommended when a child's bones are still growing or in cases of moderate scoliosis. Surgery may be recommended in patients that exhibit progressive deformity and in adolescents with a Cobb angle more than 45° to 50°. Scoliosis of this severity may be associated with heart and lung problems in childhood, which may become increasingly problematic in adulthood. However, surgery is not without its risks. Not only is there a high risk for neurological impairment arising from surgery, it also leads to frequent hospitalizations, increase costs, and negatively affect quality of life.¹

MAGEC Spinal Bracing & Distraction System

The MAGnetic Expansion Control (MAGEC) Spinal Bracing and Distraction System is comprised of a sterile single use spinal rod that can be surgically implanted. The implanted MAGEC rod is used to brace the spine during growth to minimize the progression of scoliosis. The system includes a non-sterile handheld External Remote Controller (ERC or ERC 2) that is used periodically after implantation to non-invasively distract the implanted spinal rod. The titanium MAGEC rod includes an actuator portion that holds a small internal magnet. The magnet in the actuator can be turned non-invasively by use of the ERC, which is electrically powered. The hand-held non-invasive ERC is placed over the patient's spine and then manually activated, which causes the magnet within the implanted MAGEC rod to rotate and distract. Once the physician determines that the implant has achieved its intended use and is no longer required, the device is explanted.

SUMMARY OF EVIDENCE

For individuals with early onset scoliosis, it appears the MAGEC System is associated with significant improvement in curve correction and spinal growth in children with EOS. When compared with TGRs, the MAGEC System resulted in similar improvement in curve correction and spinal growth. Whether these studies were sufficiently powered to detect differences between groups is unknown. Some uncertainty remains regarding the comparative safety of MCGRs with TGRs, mostly due to a paucity of evidence performing statistical analyses comparing the 2 growth rods. In addition, the impact of MCGRs on outcomes related to patient and family quality of life and burden of care appears favorable but few studies have reported on these outcomes. The evidence is sufficient to determine that the technology results in an improvement in the net health outcome.

Rationale

Evidence reviews assess clinical evidence to determine whether the use of a technology improves the net health outcome. Broadly defined, health outcomes are length of life, quality of life, and ability to function including benefits and harms. Every clinical condition has specific outcomes that are important to individuals and to managing the course of that condition. Validated outcome measures are necessary to ascertain whether a condition improves or worsens; and whether the magnitude of that change is clinically significant. The net health outcome is a balance of benefits and harms. The following is a summary of the key literature to date.

Clinical Context and Therapy Purpose

The purpose of magnetically controlled growing rods (MCGRs) in individuals with severe early onset scoliosis is to provide a treatment option that is an alternative to or an improvement on traditional growing rods (TGRs).

Curve Correction & Kyphosis

Six single-arm studies measured curve correction with MCGRs from preimplant to latest follow-up. The overall results of these studies suggest a statistically significant improvement in Cobb angle among all patients in three studies. One repeated-measures time series found no difference in mean correction. Two studies stratified results by patients who had undergone

conversion from TGR or from a vertical expandable prosthetic titanium rib. In both studies, patients who were undergoing a primary surgery with MCGR achieved a statistically significant correction, whereas patients who were undergoing conversion to MCGR did not achieve a statistically significant improvement. Five of the six studies evaluated the effect of MCGR on kyphosis. MCGR did not have a statistically significant effect on kyphosis. Table 1 summarizes the effect of MCGR on curve correction and kyphosis from the single-arm studies.

Table 1. Summary of the Efficacy of MCGR on Curve Correction and Kyphosis in Single-Arm Studies

Author (Year)	Study Design	N	Mean MCGR F/U	Curve Correction and Kyphosis (Mean Degrees)
Hosseini et al (2016) ³	Retrospective	23	2 Years	Curve correction (BL;f/u): Primary pts; 61.3; 39.1 (p<0.05) Conversion pts: 49.4; 44 (p=NS)
Rolton et al (2016) ⁴	Prospective, nonrandomized	21	24 mo	Cobb angle (BL;f/u): 54, 35 (p=0.01)
Kwan et al (2017) ⁵	Retrospective review	30	37 mo	Cobb angle at last f/u: 33.5 (range, 6-65) Mean Cobb correction: 21.5 (95% CI, -17.6 to 65) % Cobb correction: 33.6% (95% CI, -38.8% to 78.9%) Kyphosis: 22.7 (range NR)
Lorenz et al (2017) ⁶	Prospective, nonrandomized	21	2.2 yrs	Cobb angle: Pts w/o prior spinal surgery (BL; postimplant): 70; 30 (p<0.001) Pts with prior VEPIR (BL;postimplant): 30; 18 (P=NR) All pts at final f/u: 31 Kyphosis: BL of pts w/o prior spinal surgery: 46 BL of pts with prior VEPTR: 44 All pts final f/u: 37
Mardare et al (2018) ⁷	Prospective cohort	35	41.1 mo	Cobb angle (BL;f/u): 52.3 (SD 17.0); 38.7 (SD 16.1) (p=0.001) Thoracic Kyphosis: 43.7 (SD 20.9); 47.7 (SD 43.8) (p=0.645)
Subramanian et al (2018) ⁸	Observational study	31	47.3 mo	Cobb angle (BL; f/u): 53.8 (range, 13.8-90.8), 37.3 (range, 11.1-69.9) (P<0.001) Thoracic kyphosis (BL; f/u): 45.1 (range, 10.0-89.2); 42.2 (range, 8.5-83.9) (P=0.23) PJK: 14.5 (range, 2.3-62.1), 12.0 (range, 3.0-29.2) (P=0.25)

BL, baseline; f/u, follow-up; MCGR, magnetically controlled growing rod; NR, not reported; NS, not statistically significant; mo: months; yrs: years; PKJ, proximal junctional kyphosis; pts, patients; VEPTR, vertical expandable prosthetic titanium rib

Migliorini et al (2022) conducted a systematic review to investigate the efficacy and feasibility of MCGR in early onset scoliosis (EOS).¹⁶ This systematic review was conducted according to the PRISMA guidelines. PubMed, Google scholar, Embase, and Scopus were accessed in May 2022. All the clinical trials which investigate the role of MCGR for early onset scoliosis

were accessed. Only studies reporting data in patients younger than 10 years with a preoperative Cobb Angle greater than 40° were eligible. The following data was extracted at baseline and at last follow-up: mean kyphosis angle, overall mean Cobb angle, mean T1-S1 length. Data from complication were also collected. Data from 23 clinical studies (504 patients) were included in the present study. 56% (282 of 504) were females. The average length of the follow-up was 28.9 ± 16.0 months. The mean age of the patients was 8.7 ± 1.9 years old. The mean BMI was 17.7 ± 7.6 kg/m². The mean kyphosis angle had reduced by the last follow-up ($P = 0.04$), as did the overall mean Cobb angle ($P < 0.0001$), while the overall T1-S1 length increased ($P = 0.0002$). Implant-associated complications, followed by spinal alignment failure, wound healing ailments, pulmonary complications, progressive trunk stiffness, persistent back pain, and fracture. The authors concluded that the current evidence indicates that MCGR may be effective to distract the spine and model the curve in EOS.

In 2022, Matsumoto et al described contraindications to the MCGR in patients with EOS by establishing consensus amongst expert surgeons who treat these patients frequently.¹⁷ Nine pediatric spine surgeons from an international EOS study group participated in semi-structured interviews via email to identify factors that influence decision making in the use of MCGR. A 39-question survey was then developed to specify these factors as contraindications for MCGR-these included patient age and size, etiology, medical comorbidities, coronal and sagittal curve profiles, and skin and soft tissue characteristics. Pediatric spine surgeons from the EOS international study group were invited to complete the survey. A second 29-item survey was created to determine details and clarify results from the first survey. Responses were analyzed for consensus ($> 70\%$), near consensus (60-69%), and no consensus/variability ($< 60\%$) for MCGR contraindication. 56 surgeons of 173 invited (32%) completed the first survey, and 64 (37%) completed the second survey. Responders had a mean of over 15 years in practice (range 1-45) with over 6 years of experience with using MCGR (range 2-12). 71.4% of respondents agreed that patient size characteristics should be considered as contraindications, including BMI (81.3%) and spinal height (84.4%), although a specific BMI range or a specific minimum spinal height were not agreed upon. Among surgeons who agreed that skin and soft tissue problems were contraindications (78.6%), insufficient soft tissue (98%) and skin (89%) to cover MCGR were specified. Among surgeons who reported curve stiffness as a contraindication (85.9%), there was agreement that this curve stiffness should be defined by clinical evaluation (78.2%) and by traction films (72.3%). Among surgeons who reported sagittal curve characteristics as contraindications, hyperkyphosis (95.3%) and sagittal curve apex above T3 (70%) were specified. Surgeons who indicated the need for repetitive MRI as a contraindication (79.7%) agreed that image quality (72.9%) and not patient safety (13.6%) was the concern. In the entire cohort, consensus was not achieved on the following factors: patient age (57.4%), medical comorbidities (46.4%), etiology (53.6%), and coronal curve characteristics (58.9%). Surgeon consensus suggests that MCGR should be avoided in patients who have insufficient spinal height to accommodate the MCGR, have potential skin and soft tissue inadequacy, have too stiff a spinal curve, have too much kyphosis, and require repetitive MRI, particularly of the spine.

MCGR Versus TGR

The results of the four studies evaluating curve correction suggest that there was no statistically significant difference between MCGRs and TGRs in Cobb angle improvement, with both types of growing rods leading to similar curve improvement. The mean Cobb angle at the latest follow-up ranged from 15.9° to 41° for the MCGR group and from 13.1° to 42° for the

TGR group. No difference was noted between groups in kyphosis as evaluated in two studies. Table 2 presents a summary of curve correction and kyphosis outcomes.

Table 2. Summary of the Effect of MCGR Versus TGR on Curve Correction and Kyphosis

Author (Year)	Study Design	N	Mean MCGR F/U	Curve Correction and Kyphosis (MCGR; TGR) (mean degrees)
Akbarnia et al (2014) ⁹	Retrospective cohort	24	2.5 yrs	Cobb angle at last f/u: 38; 42 (p=0.55) Maximum kyphosis angle: 43; 46 (p=0.61)
Teoh et al (2016) ¹⁰	Retrospective cohort	37	34 mo	Cobb angle at last f/u: 41 (range, 33-47); 38 (range, 27-52) (p=0.39)
Bekmez et al (2018) ¹¹	Retrospective cohort	20	39.3 mo	Cobb angle at last f/u: 15.9 (range, 1-42); 13.1 (range, 4-35) (P=0.604) Kyphosis at last f/u: 44.1 (range, 27-70); 35.2 (range, 13-35) (P=0.08)
Doany et al (2018) ¹²	Retrospective cohort	44	34.3 mo	Cobb angle at last f/u: 32.5 (range, 8-62); 42.0 (range, 40-104) (P=0.61)

f/u, follow-up; MCGR, magnetically controlled growing rod; TGR, traditional growing rod; mo: months; yrs: years

Spinal and Thoracic Height

Results from two comparative studies suggest no difference between MCGR and TGR on spine or thoracic height. Single-arm studies generally showed a statistically significant improvement from baseline to last follow-up when analyses were performed.

Table 3. Summary of the Effect of MCGR Versus TGR on Spinal and Thoracic Height

Author (Year)	Study Design	N	Mean MCGR F/U	Spine and Thoracic Height (MCGR; TGR) (mean mm)
Akbarnia et al (2014) ⁹	Retrospective cohort	24	2.5 yr	Spine height: T1-S1 height increase per yr: 8.1; 9.7 (p=0.73) Thoracic height: T1-T12 height increase per yr: 1.5; 2.3 (P=0.83) T1-T12 height at f/u: 189; 210 (P=0.11)
Bekmez et al (2018) ¹¹	Retrospective cohort	20	39.3 mo	Spine height: T1-T12 height: 4.88 (range, 3-8); 4.95 (range, 2-7) (P=0.762)

f/u, follow-up; MCGR, magnetically controlled growing rod; TGR, traditional growing rod; mo: months; yr: years

Changes in thoracic and spinal height were reported in four studies. The results of these studies showed a significant increase in both thoracic and spinal height in two studies, as well as a statistically significant difference in patients undergoing primary implantation with MCGR. Statistical significance was not assessed among patients undergoing a conversion from TGR and in a study among non-ambulatory patients with type II spinal muscular atrophy. Table 4 summarizes the effect of MCGR on spinal and thoracic height.

Table 4. Summary of the Effect of MCGR on Spinal and Thoracic Height

Author (Year)	Study Design	N	Mean MCGR F/U	Spine and Thoracic Height (mean mm)
Hosseini et al (2016) ³	Retrospective study	23	2 yr	Spine height <i>T1-S1</i> (BL; f/u): Primary: 252.7; 292.8 ($P<0.05$) Conversion: 270.3; 290.2 ($P=NR$) Thoracic height <i>T1-T12</i> (BL; f/u): Primary: 156.2; 181.4 ($P<0.05$) Conversion pts: 171.3; 180.2 ($P=NR$)
Lorenz et al (2017) ⁶	Prospective nonrandomized	21	2.2 yr	Spinal height: BL of pts w/o prior spinal surgery: 234 BL of pts w/ prior VEPTR: 287 All pts final f/u: 311 ($P=NR$)
Mardare et al (2018) ⁷	Prospective cohort	35	41.1 mo	Spinal height (BL; f/u): <i>T1-S1</i> height: 292.4 (SD 50.0); 327.1 (SD 51.6) ($P=0.007$) Thoracic height (BL; f/u): <i>T1-T12</i> height: 168.6 (32.8); 190.5 (36.6) ($P=0.013$)
Subramanian et al (2018) ⁸	Observational study	31	47.3 mo	Spinal height (BL; f/u): <i>T1-S1</i> height: 286.9 (range, 209-378); 337.9 (range, 240-427) ($P<0.001$) Thoracic height (BL; f/u): <i>T1-T12</i> height: 168.1 (range, 107-228); 197.9 (range, 124-269) ($P=0.003$)

BL, baseline; f/u, follow-up; MCGR, magnetically controlled growing rod; NR, not reported; pts, patients; VEPTR, vertical expandable prosthetic titanium rib; mo: months; yr: years

Adverse Events

Adverse events (AEs) were common across the studies, with 19% to 70% of patients experiencing at least one event. Similarly, device-related AEs were common across the eligible studies. Substantial uncertainty remains regarding the comparative safety between MCGRs and TGRs.

Among the three comparative studies reporting on device related events, only one performed a statistical analysis suggesting no difference in the number of patients with an AE. Among specific device-related events, patients treated with MCGR reported statistically fewer superficial infections compared with TGR. No statistically significant differences were noted between groups for deep infection rates or metalwork problems. In the other two comparative studies, patients treated with TGR reported a greater incidence of device-related AEs and AEs overall.

In single-arm studies, the proportion of patients experiencing AEs ranged from 19% to 68%. The most common device-related AEs included: screw failure, screw pull-out, or failure of fixation in seven studies, ranging in incidence from 7% to 30% of device-related events; rod breakage reported in six studies, ranging from incidence of 10% to 57% of device-related

events; and device failure in five studies, ranging in incidence from 4% to 50% of device-related events. Table 5 summarizes the treatment-related AEs.

Table 5. Treatment Related Adverse Events

Author (Year)	Study Design	Overall AEs (# events)	Pts with AE (# [%] pts)	Device Related AEs
Akbarnia et al (2014) ⁹	Retrospective cohort	MCGR: 12 TGR: 25	MCGR: 4 (33%) TGR: 11 (92%)	Implant-related AE (# events) (MCGR; TGR): 8; 13 Surgical site infections (# events) (MCGR; TGR): 0; 4
Teoh et al (2016) ¹⁰	Retrospective cohort	MCGR: 9 TGR: 40	MCGR: 7 (70%) TGR: 21 (77%) OR 0.67 (95% CI, 0.13-3.40; <i>P</i> =0.62)	Superficial infection (MCGR; TGR) (# [%] pts): 0 (0); 11 (42%); OR, 0.07 (95% CI, 0.004-1.29); <i>P</i> =0.017, favoring MCGR Deep infection (MCGR; TGR) (# [%] pts): 1 (10%); 9 (33%); OR, 0.22 (95% CI, 0.02-2.04); <i>P</i> =0.22 Metalwork problems (MCGR; TGR) (# [%] pts): 7 (70%); 9 (33%) OR, 4.67 (95% CI, 0.97-22.46); <i>P</i> =0.045
Bekmez et al (2018) ¹¹	Retrospective cohort	MCGR: 3 TGR: 5	NR	Rod breakage (MCGR; TGR) (# events): 2; 3 Proximal anchor failure (MCGR; TGR) (# events): 1; 2
Hosseini et al (2016) ³	Retrospective cohort	41	11 (48%)	Implant-related: 10/11 pts (91%) w/ 14/41 (34%) events Rod fracture/collapse: 8 (57%) events Loss of distraction: 2 (14%) events Pedicle screw pull-out: 1 (7%) event Pain on distraction: 1 (7%) event Lack of lengthening: 1 (7%) event Rods shorten instead of lengthened: 1 (7%) event
Rolton et al (2016) ⁴	Prospective, nonrandomized	NR	6 (29%)	Failure of fixation at anchor point: 3 (14%) pts Rod breakage: 2 (10%) pts Skin breakdown: 1 (5%) pt
Kwan et al (2017) ⁵	Retrospective cohort	NR	15 (50%)	Failure of rod distraction: 6 (42.9%) pts Failure of proximal foundation: 4 (28.6%) pts Rod breakage: 2 (14.3%) pts Proximal failure w/ infection: 1 (7.1%) pt Infection: 1 (7.1%) pt

				Coronal imbalance: 1 (7%) pt
Lorenz et al (2017) ⁶	Prospective, nonrandomized	NR	4 (19%)	Implant dislocation: 1 (25%) pt Rib fracture: 2 (50%) pts Superficial wound infection: 1 (25%) pt
Beaven et al (2018) ¹³	Case series	NR	14 (50%)	Failure to lengthen under general anesthesia: 7 (50%) pts Broken metalwork: 5 (36%) pts Ran out of rod length: 1 (7%) pt Screw failure: 1 (7%) pt
Mardare et al (2018) ⁷	Prospective study	NR	13 (37%)	Total device related: 10 (29%) pts Rod breakage: 3 (30%) pts Implant failures: 3 (30%) pts Proximal anchor pull-outs: 2 (20%) pts Rod slippage: 1 (10%) pts Deep infection: 1 (10%) pts
Subramanian et al (2018) ⁸	Observational study	23	21 (68%)	Failure of actuator pin: 7 (30%) events Loose proximal rods: 5 (22%) events Infection: 5 (22%) events Broken rod: 4 (17%) events Decompensation of curve: 1 (4%) event Spinal cord compression from pedicle screw: 1 (4%) event

AE(s), adverse event(s); MCGR, magnetically controlled growing rod; NR, not reported; OR, odds ratio; pt(s), patient(s); TGR, traditional growing rod

SUPPLEMENTAL INFORMATION

PRACTICE GUIDELINES AND POSITION STATEMENTS

Guidelines or position statements will be considered for inclusion in 'Supplemental Information' if they are issued by, or jointly by, a US professional society, an international society with US representation, or National Institute for Health and Care Excellence (NICE). Priority will be given to guidelines that are informed by a systematic review, include strength of evidence ratings, and include a description of management of conflict of interest.

National Institute for Health and Care Excellence (NICE)¹⁸

In 2104 NICE published a provisional recommendation on The MAGEC system for spinal lengthening in children with scoliosis stating, "The case for adopting the MAGEC system for spinal lengthening in children with scoliosis is supported by the evidence. Using the MAGEC system would avoid repeated surgical procedures for growth rod lengthening. This could reduce complications and have other physical and psychological benefits for affected children and their families".

Ongoing and Unpublished Clinical Trials

Some currently unpublished trials that might influence this review are listed in Table 6.

Table 6. Summary of Key Trials

NCT No.	Trial Name	Planned Enrollment	Completion Date
Ongoing			
NCT04296903	Post-approval Registry Study to Evaluate the Continued Safety and Probable Benefit of the MID-C System for 5 Years Post-Implantation in Adolescent Idiopathic Scoliosis (AIS)	200	May 2028
NCT04058561	Hospital-based cluster trial: magnetically controlled growing rods using distraction intervals (MCGR)	210	Dec 2027 (active not recruiting)
Unpublished			
NCT02299362	The treatment of progressive early onset spinal deformities: a multi-center outcome study	2602	Feb 2020
NCT03519321	Minimal invasive deformity correction (MID-C) system for early onset scoliosis	60	Jul 2023

Regulatory Status

The FDA has classified the MAGEC System under Product Code PGN. This product code is specific to “growing rod system-magnetic actuation.” Based on a search of the FDA Classification Database, the MAGEC System is the only available magnetically controlled growth rod system cleared for use in the U.S.

Device	K Number	Notification Date	Indication
MAGEC® System	K201543	July 30, 2020	The MAGEC® System is intended for skeletally immature patients less than 10 years of age with severe progressive spinal deformities (e.g., Cobb angle of 30 degrees or more; thoracic spine height less than 22 cm) associated with or at risk of Thoracic Insufficiency Syndrome (TIS). TIS is defined as the inability of the thorax to support normal respiration or lung growth.
MAGEC® System	K171791	Aug 31, 2017	“Skeletally immature patients less than 10 years of age with severe progressive spinal deformities (e.g., Cobb angle of 30° or more; thoracic spine height less than 22 cm) associated with or at risk of Thoracic Insufficiency Syndrome (TIS). TIS is defined as the inability of the thorax to support normal respiration or lung growth.”
MAGEC® Spinal Bracing and Distraction System	K160352	Oct 21, 2016	Same as above
MAGEC® Spinal Bracing and Distraction System (NuVasive Specialized Orthopedics Inc.)	K161751	Sept 2, 2016	Same as above
MAGEC 2 Spinal Bracing and Distraction System	K150885	May 29, 2015	Same as above

MAGEC Spinal Bracing and Distraction System	K141278	Mar 24, 2015	Same as above
MAGEC Spinal Bracing and Distraction System	K140613	Sept 18, 2014	Same as above
Ellipse MAGEC Spinal Bracing and Distraction System	K140178	Feb 27, 2014	Same as above

Government Regulations

National:

No NCD found on this procedure.

Local:

No LCD found on this procedure.

(The above Medicare information is current as of the review date for this policy. However, the coverage issues and policies maintained by the Centers for Medicare & Medicare Services [CMS, formerly HCFA] are updated and/or revised periodically. Therefore, the most current CMS information may not be contained in this document. For the most current information, the reader should contact an official Medicare source.)

Related Policies

- Genetic Testing-DNA Based Testing for Adolescent Idiopathic Scoliosis
- Vertebral Body Tethering and/or Stapling for Scoliosis

References

1. Scoliosis Research Society. Scoliosis. <https://www.srs.org/patients-and-families/conditions-and-treatments/parents/scoliosis>. Accessed March 2026.
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The articles reviewed in this research include those obtained in an Internet based literature search for relevant medical references through March 2026, the date the research was completed.

Joint BCBSM/BCN Medical Policy History

Policy Effective Date	BCBSM Signature Date	BCN Signature Date	Comments
7/1/19	4/16/19		Joint policy established
7/1/20	4/14/20		Routine policy maintenance, no change in policy status.
7/1/21	4/20/21		Routine policy maintenance, no change in policy status.
7/1/22	4/19/22		Routine policy maintenance, no change in policy status.
7/1/23	D4/28/23		Added “curve progression despite compliance with bracing or intolerance to brace use.” Vendor Managed: Turning Point, OR-1020. (ds)
7/1/24	4/16/24		Routine policy maintenance, no change in status. Vendor managed: Turning Point (ds)
7/1/25	4/15/25		Routine policy maintenance, no change in status. Vendor managed: Turning Point (ds)
7/1/26	4/21/26		Updated rationale and supplemental section, added 3 references. No change in status. Vendor managed: Turning Point (ds)

Next Review Date: 2nd Qtr. 2027

Pre-Consolidation Medical Policy History

Original Policy Date	Comments
BCN:	Revised:
BCBSM:	Revised:

BLUE CARE NETWORK BENEFIT COVERAGE
POLICY: GROWING RODS FOR SCOLIOSIS (E.G., MAGEC SPINAL BRACING AND DISTRACTION SYSTEM)

I. Coverage Determination:

Commercial HMO (includes Self-Funded groups unless otherwise specified)	Covered per policy
BCNA (Medicare Advantage)	See government section
BCN65 (Medicare Complementary)	Coinsurance covered if primary Medicare covers the service.

II. Administrative Guidelines:

- The member's contract must be active at the time the service is rendered.
- Coverage is based on each member's certificate and is not guaranteed. Please consult the individual member's certificate for details. Additional information regarding coverage or benefits may also be obtained through customer or provider inquiry services at BCN.
- The service must be authorized by the member's PCP except for Self-Referral Option (SRO) members seeking Tier 2 coverage.
- Services must be performed by a BCN-contracted provider, if available, except for Self-Referral Option (SRO) members seeking Tier 2 coverage.
- Payment is based on BCN payment rules, individual certificate and certificate riders.
- Appropriate copayments will apply. Refer to certificate and applicable riders for detailed information.
- CPT - HCPCS codes are used for descriptive purposes only and are not a guarantee of coverage.