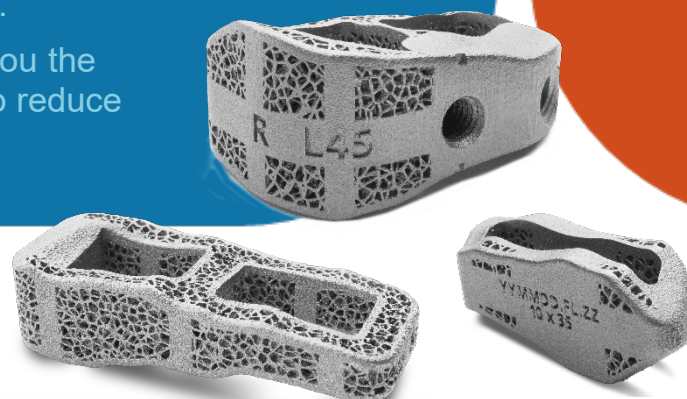




# get your power back

Unlike stock devices that square up the disc space, aprevo® devices are personalized to conform to patient anatomy and achieve the planned correction of spinal malalignment.

The aprevo® patient specific plans and devices give you the power to achieve your surgical plan, which is known to reduce complications and improve patient outcomes.<sup>1</sup>



aprevo® lateral, anterior and transforaminal devices



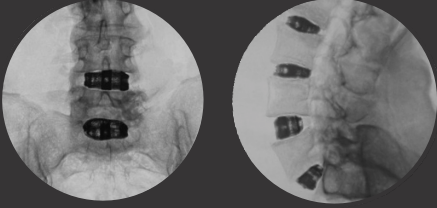
## New Technology Add-on Payment Up to \$40,950

The aprevo® anterior, lateral and transforaminal interbody cages were awarded FDA Breakthrough Device Designation (BDD) in 2020 based on the potential to provide a more effective treatment when compared to existing treatment options. Spine fusion procedures utilizing Carlsmed's aprevo® devices are eligible for an additional reimbursement of up to **\$40,950** per procedure from CMS. Commercial payer reimbursement varies by contract.

## Improve fusion conditions

aprevo® personalized interbody devices have an anatomical interface with vertebral endplates. The benefits of this feature have been well studied:

**The aprevo® advantage**



The aprevo® anatomical interface provides an endplate-to-implant fit that can not be obtained with stock devices.

aprevo®  
A/P view

aprevo®  
lateral view

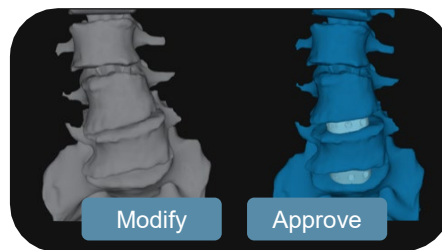
- Improved fit to achieve alignment<sup>2</sup>
- 28% decrease in posterior rod stress<sup>3</sup>
- 50x increase in contact area<sup>4</sup>
- 30x reduction in stress concentration<sup>4</sup>
- 45% more effective contact<sup>5</sup>
- Reduced stress increase inside the adjacent disc and facets<sup>6</sup>
- Decrease postop subsidence<sup>7</sup>
- Decrease severity of subsidence-related pain<sup>7</sup>

## Simplify surgical planning

Carlsmed simplifies the data upload process for your clinic and/or radiology. After your patient's CTs and X-Rays have been processed by Carlsmed®, you will receive segmented 3D models of the spinal deformity and a proposed correction in the aprevo® app. Carlsmed's secure user interface allows you to easily review, modify, and approve the proposed 3D surgical plan. The aprevo® personalized titanium devices are ready to be shipped within weeks.



**Step 1:** Upload CT & Standing A/P and Lateral X-Ray images



**Step 2:** Review plan



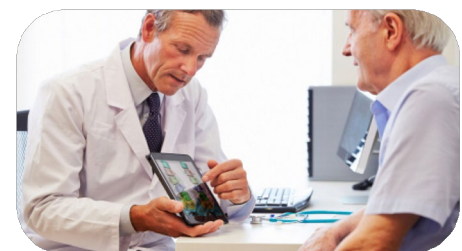
**Step 3:** Sterile implants and inserter arrive for surgery

## Reduce "OR clutter" and lower processing costs

Your patient's devices are delivered to your operating room in a single package with a sterile insertion tool. The aprevo® approach reduces clutter, eliminates implant trays and lowers processing costs.

## Patient specific configurations and sizing

The aprevo® devices accommodate lateral, anterior and transforaminal surgical approaches to the lumbar spine. Every aspect of endplate position and implant dimension\* is dictated by you, based on the specific needs of your patient. Implant lordosis from 0° to 30° (anterior/lateral) and from 0° to 15° (transforaminal) is available, as well as coronal angulation from 0° to 15°.



Patients come to you for personalized care. Consider personalized implants for their treatment.

**Ask them what they would prefer.**



Carlsmed, Inc. 1800 Aston Ave. Ste 100 Carlsbad, CA 92008  
[info@carlsmed.com](mailto:info@carlsmed.com)  
[carlsmed.com](http://carlsmed.com)

### References:

1. ISSG, et al. Podium abstract #18. SRS 2021. 2. Carlsmed data. NASS 2020. 3. Chatham, et al. J Biomechanical Eng. MAY 2017. 4. Patel, Univ. of Colorado at Denver, 2018. 5. Wang, et al. Proc Inst Mech Eng H. April 2018. 6. Zhang, et al. Orthopaedic Surgery (2016) Vol. 6:8. 7. Fengbin, et al. Eur Spine J (2013) Vol. 22.

\* Within FDA cleared parameters