HEALTH ECONOMICS & REIMBURSEMENT

Minima™ & Minima™ *Pro* Stent Systems

CODING & REIMBURSEMENT GUIDE

Hospital Inpatient
Effective October 1, 2026 to September 30, 2027

Physician
Effective January 1, 2026 to December 31, 2026

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OVERVIEW

This guide provides reference information on coverage, coding, and payment for procedures that use the Minima™ and Minima™ Pro Stent Systems in a manner consistent with their FDA-approved labeling. It reflects Medicare payment rules for hospital inpatient services in fiscal year (FY) 2027 and for physician services in calendar year (CY) 2026.

DISCLAIMER

Health economic and reimbursement information provided by Renata is gathered from third-party sources and is subject to change without notice because of complex and frequently changing laws, regulations, rules, and policies. This information is presented for illustrative purposes only and does not constitute reimbursement or legal advice. It is not intended to increase or maximize payment by any payer, and Renata does not guarantee that the codes listed are complete or error-free or that any payment will be received. Coding, coverage, and payment do not guarantee reimbursement.

Renata encourages providers to submit accurate and appropriate claims for services. It is always the provider's sole responsibility to determine medical necessity, the proper site for delivery of any services, and to submit appropriate codes, charges, and modifiers for services rendered. It is also the provider's responsibility to understand and comply with Medicare national coverage determinations (NCD), Medicare local coverage determinations (LCD), and any other coverage requirements established by relevant payers, which can be updated frequently. Renata recommends that you consult with your payers, reimbursement specialists, and/or legal counsel regarding coding, coverage, and reimbursement matters.

Renata does not promote the use of its products outside their FDA-approved labeling. Payer policies vary and should be verified before treatment for limitations on diagnosis, coding, or site of service. This coding information may include codes for procedures for which Renata currently offers no cleared or approved products; such codes are included solely to provide comprehensive coding information and are not intended to promote the use of any Renata product for which it is not cleared or approved. The health care provider is solely responsible for selecting the site of service and treatment modalities appropriate for the patient based on the patient's medical needs and the provider's independent medical judgment.

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IMPORTANT NOTE

Payment amounts in this guide are Medicare national average (unadjusted) rates. Actual payment varies by facility, locality, and payer, and the rates shown may not apply to every institution. Because few pediatric patients are Medicare beneficiaries, Medicare rates are provided as a baseline reference.

REIMBURSEMENT SUPPORT

Renata Medical can help with coverage, coding, and payment questions for the Minima™ and Minima™ Pro Stent Systems. Coding and reimbursement assistance is provided subject to the disclaimers in this guide.

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PRODUCT INFORMATION[9]

The Minima™ and Minima™ Pro Stent Systems are balloon-expandable cobalt chromium stents pre-mounted on a delivery system that allows sheathless delivery to the target lesion. Both systems are indicated for use in the treatment of native or acquired pulmonary artery stenoses or coarctation of the aorta in neonates, infants, and children at least 1.5 kg in weight. The Minima™ Pro Stent System adds a 10 mm balloon size and has a 70 cm working length.

After implantation, the stent may be re-dilated with a standard angioplasty balloon as the patient grows. Codes for initial placement and for re-dilation procedures appear in the Hospital Inpatient and Physician sections of this guide.

Refer to the Instructions for Use for important information regarding re-dilation, including precautions and limitations.

ORDERING INFORMATION — MINIMA™ PRO STENT SYSTEM

PART NUMBER	PRODUCT	STENT DIAMETER × LENGTH	WORKING LENGTH
FG-0009	Minima™ Pro Stent System	6 mm × 16 mm	70 cm
FG-0010	Minima™ Pro Stent System	8 mm × 16 mm	70 cm
FG-0011	Minima™ Pro Stent System	10 mm × 16 mm	70 cm

COVERAGE CONSIDERATIONS FOR PEDIATRIC PATIENTS[2,8]

The Minima™ and Minima™ Pro Stent Systems are used to treat neonates, infants, and children. Many pediatric patients are covered by Medicaid, the Children's Health Insurance Program (CHIP), or a commercial health plan, and some may have no insurance coverage. Few are Medicare beneficiaries; this guide refers to Medicare payment rates as a baseline reference for providers.

MEDICARE POLICY AS A REFERENCE POINT

There is currently no Medicare national coverage determination (NCD) specific to the Minima™ or Minima™ Pro Stent Systems. Where no NCD or local coverage determination (LCD) applies, coverage is decided by the Medicare Administrative Contractor based on whether the service is reasonable and necessary for the individual patient.

In the FY 2026 Inpatient Prospective Payment System (IPPS) final rule, following public notice and comment, CMS approved a New Technology Add-On Payment (NTAP) for the Minima™ Stent System after evaluating the application against the NTAP eligibility criteria. CMS's full discussion of the application is publicly available in the Federal Register (see reference 2).

NTAP is a Medicare inpatient payment policy. It is not a national coverage determination, and it does not establish coverage or payment requirements for Medicaid, CHIP, or commercial health plans. Some payers consider Medicare policy and published CMS rulemaking when developing their own coverage and payment policies, and providers may find this publicly available information useful when communicating with payers.

PRIVATE PAYER COVERAGE

Coverage policies vary by payer and plan. Verify the patient's benefits and any applicable medical policy before the procedure. Document medical necessity, the diagnosis, and use of the device consistent with its FDA-approved labeling.

Commercial inpatient payment may be based on DRGs, per diem rates, case rates, or a percentage of charges. Some commercial contracts include provisions for high-cost implants or new technology, such as implant carve-outs.

MEDICAID AND CHIP COVERAGE

Medicaid and CHIP provide coverage for eligible children. Under Medicaid's Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefit, states must provide medically necessary services needed to correct or ameliorate health conditions for enrolled children under age 21.

Each state sets its own Medicaid inpatient payment method, which may include All Patient Refined DRGs (APR-DRGs), per diem rates, or other approaches. Medicare's New Technology Add-On Payment (NTAP) applies to Medicare inpatient claims; Medicaid programs and managed care plans may have their own policies for high-cost cases and new technologies, such as outlier payments or separate payment for certain devices. Check with the state Medicaid agency or the patient's managed care plan.

HOSPITAL INPATIENT[1]

Effective October 1, 2026 to September 30, 2027

HOSPITAL SERVICES

Minima™ and Minima™ Pro procedures are commonly performed in the inpatient setting. When a hospital is paid under a prospective payment system, such as MS-DRGs or a negotiated per diem rate, the stent is generally not paid separately; a single payment covers the services delivered during the stay. For Medicare inpatient discharges, the New Technology Add-On Payment described below may provide additional payment.

Because coding, coverage, and payment policies change periodically, users should verify information with the applicable payer before submitting claims.

NEW TECHNOLOGY ADD-ON PAYMENT (NTAP)[1,2]

NTAP is a Medicare Inpatient Prospective Payment System (IPPS) payment that supplements the MS-DRG payment for qualifying new technologies. CMS approved NTAP for the Minima™ Stent System effective October 1, 2025 (FY 2026), and the payment continues for discharges in FY 2027 (October 1, 2026 to September 30, 2027). Cases involving Minima™ Pro Stent System may be reported using the same ICD-10-PCS codes described for Minima™ and may qualify for NTAP when applicable Medicare payment requirements are met.

HOW NTAP IS CALCULATED

For a qualifying case, Medicare pays the MS-DRG payment plus the lesser of:

- 65% of the cost of the new technology, or
- 65% of the amount by which the cost of the case exceeds the standard MS-DRG payment.

The cost of the case is estimated by applying the hospital's cost-to-charge ratio to its total covered charges.

Maximum NTAP per case, FY 2027: $22,685

BILLING REMINDERS

- Report one of the new technology ICD-10-PCS codes for the initial stent placement (X27339B, X27439B, X27W39B, or X27X39B; see Procedure Codes).
- Include the device charge on the claim (for example, revenue code 0278, Other Implants) so the cost of the case reflects the technology.
- NTAP applies to Medicare IPPS claims. It does not apply to re-dilation procedures, in which no new device is placed.

MEDICARE NATIONAL AVERAGE REIMBURSEMENT[1,3]

The ICD-10-PCS codes for Minima™ and Minima™ Pro procedures group to MS-DRGs 252–254 (Other Vascular Procedures) under MS-DRG Grouper Version 44.0. Final MS-DRG assignment depends on the principal diagnosis, secondary diagnoses, and all procedures reported for the stay.

MS-DRG	DESCRIPTION	FY 2027 RELATIVE WEIGHT	MEDICARE NATIONAL AVERAGE
252	Other Vascular Procedures with MCC	3.4822	**$25,732**
253	Other Vascular Procedures with CC	2.6265	**$19,409**
254	Other Vascular Procedures without CC/MCC	1.7961	**$13,272**

National average = FY 2027 relative weight × $7,389.51 (FY 2027 operating standardized amount of $6,849.48 plus capital federal rate of $540.03). Amounts are unadjusted for wage index, indirect medical education, disproportionate share, and outlier payments, and exclude NTAP. MCC: major complication or comorbidity. CC: complication or comorbidity.

ICD-10-PCS PROCEDURE CODES[4]

Scenario 1 — Initial placement. For initial placement of the Minima™ or Minima™ Pro stent, report the new technology code for the treated vessel. These codes identify cases that may qualify for NTAP when applicable payment requirements are met.

ICD-10-PCS CODE	DESCRIPTION
BRANCH PULMONARY ARTERY	
X27339B	Dilation of Right Pulmonary Artery with Expandable Intraluminal Device, Percutaneous Approach, New Technology Group 11
X27439B	Dilation of Left Pulmonary Artery with Expandable Intraluminal Device, Percutaneous Approach, New Technology Group 11
AORTA	
X27W39B	Dilation of Thoracic Aorta, Descending with Expandable Intraluminal Device, Percutaneous Approach, New Technology Group 11
X27X39B	Dilation of Thoracic Aorta, Ascending/Arch with Expandable Intraluminal Device, Percutaneous Approach, New Technology Group 11

Scenario 2 — Re-dilation. For balloon re-dilation of a previously implanted Minima™ or Minima™ Pro stent, in which no new device is placed, consider the codes below.

ICD-10-PCS CODE	DESCRIPTION
BRANCH PULMONARY ARTERY	
027Q3ZZ	Dilation of Right Pulmonary Artery, Percutaneous Approach
027R3ZZ	Dilation of Left Pulmonary Artery, Percutaneous Approach
AORTA	
027W3ZZ	Dilation of Thoracic Aorta, Descending, Percutaneous Approach
027X3ZZ	Dilation of Thoracic Aorta, Ascending/Arch, Percutaneous Approach

PHYSICIAN[5–7]

Effective January 1, 2026 to December 31, 2026

CPT CODE	DESCRIPTION	WORK RVU	FACILITY TOTAL RVU	NATIONAL FACILITY RATE
AORTA — STENT PLACEMENT				
33894	Endovascular stent repair of coarctation of the ascending, transverse, or descending thoracic or abdominal aorta, involving stent placement; across major side branches	17.81	25.39	**$848.05**
33895	Endovascular stent repair of coarctation of the ascending, transverse, or descending thoracic or abdominal aorta, involving stent placement; not crossing major side branches	14.18	20.21	**$675.03**
AORTA — BALLOON ANGIOPLASTY (RE-DILATION)				
33897	Percutaneous transluminal angioplasty of native or recurrent coarctation of the aorta	10.54	15.02	**$501.68**
BRANCH PULMONARY ARTERY — STENT PLACEMENT				
33900	Percutaneous pulmonary artery revascularization by stent placement, initial; normal native connections, unilateral	10.75	15.32	**$511.70**
33901	Percutaneous pulmonary artery revascularization by stent placement, initial; normal native connections, bilateral	14.14	20.15	**$673.03**
33902	Percutaneous pulmonary artery revascularization by stent placement, initial; abnormal connections, unilateral	13.65	19.45	**$649.65**
33903	Percutaneous pulmonary artery revascularization by stent placement, initial; abnormal connections, bilateral	16.09	22.95	**$766.55**
33904	Percutaneous pulmonary artery revascularization by stent placement, each additional vessel or separate lesion, normal or abnormal connections (List separately in addition to code for primary procedure)	5.39	7.70	**$257.19**
BRANCH PULMONARY ARTERY — BALLOON ANGIOPLASTY (RE-DILATION)				
92997	Percutaneous transluminal pulmonary artery balloon angioplasty; single vessel	11.68	16.39	**$547.44**
92998	Percutaneous transluminal pulmonary artery balloon angioplasty; each additional vessel (List separately in addition to code for primary procedure)	5.84	8.23	**$274.89**

National facility rate = facility total RVUs × CY 2026 conversion factor of $33.4009 (non-qualifying APM). Rates are national and unadjusted; actual payment varies by locality.

While pediatric patients are rarely Medicare beneficiaries, the Medicare rate may serve as a baseline for physician payment. Medicaid and commercial rates may vary substantially from Medicare rates.

Before reporting a balloon angioplasty code (33897, 92997, or 92998) with a stent placement code (33894–33904) in the same session, refer to the CPT parenthetical instructions for the vessel and lesion treated. It is incumbent upon the physician to determine which, if any, modifiers apply.

RESOURCES

ACRONYM DEFINITIONS

ACRONYM	DEFINITION
APR-DRG	All Patient Refined Diagnosis Related Group
APM	Alternative Payment Model
CC	Complication or Comorbidity
CHIP	Children's Health Insurance Program
CMS	Centers for Medicare & Medicaid Services
CPT	Current Procedural Terminology
CY	Calendar Year
EPSDT	Early and Periodic Screening, Diagnostic and Treatment
FY	Fiscal Year
ICD-10-PCS	International Classification of Diseases, Tenth Revision, Procedure Coding System
IPPS	Inpatient Prospective Payment System
LCD	Local Coverage Determination
MCC	Major Complication or Comorbidity
MS-DRG	Medicare Severity Diagnosis Related Group
NCD	National Coverage Determination
NTAP	New Technology Add-On Payment
PFS	Physician Fee Schedule
RBP	Rated Burst Pressure
RVU	Relative Value Unit
SSI	Supplemental Security Income

IMPORTANT SAFETY INFORMATION[9]

Rx Only
MINIMA™ AND MINIMA™ PRO STENT SYSTEMS

Indications for Use

The Minima™ and Minima™ Pro Stent Systems are indicated for use in the treatment of native or acquired pulmonary artery stenoses or coarctation of the aorta in neonates, infants, and children at least 1.5 kg in weight.

Contraindications

- Active bloodstream infection requiring antibiotic therapy within 7 days prior to stent implantation.
- History of or active endocarditis (active treatment with antibiotics) within 180 days prior to stent implantation.
- Aortic or pulmonary artery aneurysm.
- Known hypersensitivity to aspirin or heparin and cannot be treated with other antiplatelet and/or antithrombotic medications.
- Known hypersensitivity to cobalt-chromium or contrast media that cannot be adequately pre-medicated.

Warnings

- This device was sterilized with ethylene oxide and is for single use only. Do not reuse or re-sterilize this device. Attempts to re-sterilize this device can cause a malfunction, insufficient sterilization, or harm to the patient.
- Do not use the device if the sterile package is open or damaged.
- Use on or before the expiration date that is printed on the product packaging label.
- Patients who are allergic to cobalt chromium or nickel can have an allergic reaction to this device.
- Accurate measurements of the target lesion and surrounding vessel are required for correct stent choice and placement.
- Embolized devices may require surgical removal.
- Do not exceed the RBP of the balloon. An inflation device with a pressure gauge is required.
- Stent geometry does not allow for dilation beyond 24mm.

Precautions

The safety and effectiveness of the Minima Stent and Minima Pro Stent has not been established when the stent is dilated beyond 10 mm as there are currently limited clinical data on Minima Stents dilated greater than 10 mm and no clinical data available on the Minima Pro Stent dilated to greater than 10 mm in diameter. Patients must have a body weight ≥1.5 kg. Refer to the Instructions for Use for the complete list of precautions. For MRI Safety Information, refer to the current Instructions for Use.

Potential Adverse Events

Potential adverse effects (e.g., complications) associated with the use of the device include but are not limited to: aortic aneurysm/pseudoaneurysm, dissection, or rupture; arrhythmia; bleeding; death; endocarditis; femoral artery injury, thrombosis, or pseudoaneurysm; hematoma; infection; jailed side branches of the pulmonary arteries; jailed subclavian artery and/or carotid artery; myocardial infarction; pulmonary artery aneurysm/pseudoaneurysm, dissection, or rupture; stent fracture with loss of structural integrity; stent malposition dislodgement/migration or embolization requiring transcatheter or surgical adjustment or retrieval; stent stenosis; stroke or transient ischemic attack; thrombosis; vessel perforation/injury/dissection/rupture/tear.

REFERENCES

1. Medicare Program; Hospital Inpatient Prospective Payment Systems … Fiscal Year (FY) 2027 Rates. Final Rule, CMS-1849-F. Federal Register, August 4, 2026; including Table 5 (MS-DRG relative weights) and Tables 1A–1E (standardized amounts and capital federal rate). https://www.cms.gov/medicare/payment/prospective-payment-systems/acute-inpatient-pps/fy-2027-ipps-final-rule-home-page
2. Medicare Program; Hospital Inpatient Prospective Payment Systems … Fiscal Year (FY) 2026 Rates. Final Rule. Federal Register, August 4, 2025 (FR Doc. 2025-14681); NTAP approval for the Minima Stent System. https://www.federalregister.gov/documents/2025/08/04/2025-14681
3. CMS. ICD-10-CM/PCS MS-DRG v44.0 Definitions Manual. https://www.cms.gov/icd10m/FY2027-fr-v44-fullcode-cms/fullcode_cms/P0001.html
4. CMS. 2027 ICD-10-PCS. https://www.cms.gov/medicare/coding-billing/icd-10-codes
5. Medicare and Medicaid Programs; CY 2026 Payment Policies Under the Physician Fee Schedule. Final Rule, CMS-1832-F. https://www.cms.gov/medicare/payment/fee-schedules/physician/federal-regulation-notices/cms-1832-f
6. CMS. CY 2026 PFS Relative Value Files. https://www.cms.gov/medicare/payment/fee-schedules/physician/pfs-relative-value-files
7. CPT® American Medical Association. https://www.ama-assn.org/
8. Medicaid.gov. Early and Periodic Screening, Diagnostic, and Treatment. https://www.medicaid.gov/medicaid/benefits/early-and-periodic-screening-diagnostic-and-treatment
9. Renata Medical. Minima™ Pro Stent System Instructions for Use, IFU-0004 Rev. 2, and Minima™ Stent System Instructions for Use. https://renatamedical.com/manuals

CAUTION: Federal (USA) law restricts these devices to sale by or on the order of a physician. Prior to use, refer to the Instructions for Use supplied with each device or at renatamedical.com/manuals for indications, contraindications, warnings, precautions, and potential adverse events.

Information contained herein for **DISTRIBUTION** in the U.S. ONLY.

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