



Reimbursement and Coding Guide

Hernia Repair

ACell Reimbursement Support Center

Providing Reimbursement Support Services and Resources for All ACell® Products*

The ACell Reimbursement Support Center – supported by The Pinnacle Health Group – is available to assist with questions for all ACell products, including:

- **MatriStem UBM™ Products:**
Cytal® Wound Matrix | Cytal® Burn Matrix | MicroMatrix® | Gentrix® Surgical Matrix | Gentrix® Hiatal
- **Partnered Products:**
ABRA® Abdominal | ABRA® Surgical | Xpansion®

800-826-2926 Option 7
acell@thepinnaclehealthgroup.com

Monday - Friday: 8:30am - 6:00pm EST
48-hour response time (closed major holidays)

Available Services



Benefit Verification helps you research:

- Basic patient benefits
- Insurance coverage
- Patient copays
- Appropriate billing codes

Specific Contact Information:

Email: BV@thepinnaclehealthgroup.com

Fax: 215-369-9198



Prior Authorization helps you:

- Research prior authorization submission steps and required information
- Submit the prior authorization request (optional)



Claim Appeals helps you:

- Research information required to appeal a denied claim
- Submit the appeal (optional)



General Reimbursement helps you:

- Research coverage policy information for ACell products
- Access ACell product reference tools
- Review inadequate reimbursements



Reimbursement and Coding Guide

Hernia Repair

Gentrix® devices facilitate the remodeling of functional, site-appropriate tissue. Comprised of ACell's proprietary MatriStem UBM™ (Urinary Bladder Matrix) technology, these biologically-derived devices maintain an intact epithelial basement membrane, which facilitates cellular infiltration and capillary ingrowth. Gentrix surgical devices are appropriate for a range of surgical procedures, including hernia repair.

Reimbursement and eligibility for coverage for the use of these products and associated procedures varies by Medicare and payers. Coverage policies, prior authorizations, contract terms, billing edits, and site of service influence reimbursement. It is recommended that providers verify coverage and billing policies.

The following information is shared for educational purposes only to help answer common coding and reimbursement questions. While ACell® believes this information to be correct, information is subject to change without notice.

For assistance with reimbursement questions, contact the Reimbursement Support Center by phone at **800-826-2926, x 7** or by email at acell@thepinnaclehealthgroup.com.

PLEASE NOTE: The payments specified in this document reflect Medicare national, unadjusted published payments from the Centers for Medicare & Medicaid Services (CMS). Actual payment rates will vary based on geographical adjustments. As such, all codes and payments provided herein are for illustrative purposes and shall not be construed as a warranty, statement, promise or guarantee that these codes are accurate or that the product will be covered in all instances, and if covered, that reimbursement in the amounts specified will be received.

The decision of how to complete a reimbursement claim form, including codes and amounts to bill, is exclusively the responsibility of the QHPs and other providers. Coding requirements are subject to change at any time; please check with your local payer regularly for updates.

Rx ONLY - Refer to IFU with each device for indications, contraindications, and precautions. US Toll-Free 800-826-2926 ©2020 ACell, Inc. All Rights Reserved.

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Applicable FARS/DFARS Restrictions Apply to Government Use.

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Indications for Use

Refer to Product Label for Full Instructions for Use

Gentrix® Surgical Matrix Thin (3-layer) are intended for implantation to reinforce soft tissue where weakness exists in patients requiring urological, gastroenterological, or plastic & reconstructive surgery. Reinforcement of soft tissue within urological, gastroenterological, and plastic & reconstructive surgery includes, but is not limited to, the following open or laparoscopic procedures: hernia and body wall repair, colon and rectal prolapse repair, tissue repair, and esophageal repair. The Gentrix Surgical Matrix Thin minimizes tissue attachment to the device in case of direct contact with viscera.

Gentrix® Surgical Matrix (6-layer) is intended for implantation to reinforce soft tissue where weakness exists in patients requiring gastroenterological or plastic & reconstructive surgery. Reinforcement of soft tissue within gastroenterological and plastic & reconstructive surgery includes, but is not limited to, the following open or laparoscopic procedures: hernia (e.g.: hiatal/diaphragmatic) and body wall repair, colon and rectal prolapse repair, tissue repair, and esophageal repair. The Gentrix Surgical Matrix minimizes tissue attachment to the device in case of direct contact with viscera.

Gentrix® Surgical Matrix Plus (8-layer) is intended for implantation to reinforce soft tissue where weakness exists in patients requiring gastroenterological or plastic & reconstructive surgery. Reinforcement of soft tissue within gastroenterological and plastic & reconstructive surgery includes, but is not limited to, the following open or laparoscopic procedures: hernia (e.g.: hiatal/diaphragmatic) and body wall repair, colon and rectal prolapse repair, tissue repair, and esophageal repair. The Gentrix Surgical Matrix Plus minimizes tissue attachment to the device in case of direct contact with viscera.

Gentrix® Surgical Matrix Thick (8-layer) is intended for implantation to reinforce soft tissue where weakness exists in patients requiring gastroenterological or plastic & reconstructive surgery. Reinforcement of soft tissue within gastroenterological and plastic & reconstructive surgery includes, but is not limited to, the following procedures: hernia and body wall repair, colon and rectal prolapse repair, tissue repair, and esophageal repair.

Sources

- CPT® 2020 Professional (2019) American Medical Association
- 2020 Medicare Hospital Outpatient Prospective Payment System (CMS-1717-FC) CN Addendum B
- 2020 Ambulatory Surgery Center Prospective Payment System (CMS-1717-FC) CN Addendum AA-EE
- CMS-1715-F Revisions to Payment Policies under the Physician Fee Schedule and Other Revisions to Part B for CY 2020/Downloads
- FY 2020 Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals (CMS 1716-CN), Effective October 1, 2019
- 2020 Physician Fee Schedule RVU File
- 2020 ICD-10-PCS The Complete Official Code Set

Procedures: CPT Codes and Medicare Payments

Physician and Outpatient Facility

The following table contains CPT codes that may be utilized when reporting surgical procedures. Please check the current CPT manual for other codes that may be applicable. The table also includes the 2019 Medicare national unadjusted payment rates. Check with your MAC for payment rates specific to your region.

CPT Code	Description	Physician (Facility)	Hospital Outpatient		Ambulatory Surgical Center (ASC)	
		Payment	Status Indicator	Payment	Status Indicator	Payment
Inguinal, Lumbar, Ventral, Umbilical, Spigelian & Epigastric Hernia Repair						
49500	Repair initial inguinal hernia, age 6 months to younger than 5 years, with or without hydrocelectomy; reducible	\$432.71	J1	\$3,109.34	A2	\$1,377.21
49501	Repair initial inguinal hernia, age 6 months to younger than 5 years, with or without hydrocelectomy; incarcerated or strangulated	\$636.26	J1	\$3,109.34	A2	\$1,377.21
49505	Repair initial inguinal hernia, age 5 years or older; reducible	\$547.48	J1	\$3,109.34	A2	\$1,377.21
49507	Repair initial inguinal hernia, age 5 years or older; incarcerated or strangulated	\$616.05	J1	\$3,109.34	A2	\$1,377.21
49520	Repair recurrent inguinal hernia, any age; reducible	\$664.05	J1	\$3,109.34	A2	\$1,377.21
49521	Repair recurrent inguinal hernia, any age; incarcerated or strangulated	\$753.91	J1	\$3,109.34	A2	\$1,377.21
49525	Repair inguinal hernia, sliding, any age	\$603.06	J1	\$3,109.34	A2	\$1,377.21
49540	Repair lumbar hernia	\$708.80	J1	\$4,833.71	A2	\$2,194.07
49550	Repair initial femoral hernia, any age; reducible	\$605.58	J1	\$3,109.34	A2	\$1,377.21
49553	Repair initial femoral hernia, any age; incarcerated or strangulated	\$663.33	J1	\$3,109.34	A2	\$1,377.21
49555	Repair recurrent femoral hernia; reducible	\$633.01	J1	\$3,109.34	A2	\$1,377.21
49557	Repair recurrent femoral hernia; incarcerated or strangulated	\$760.77	J1	\$3,109.34	A2	\$1,377.21
49560	Repair initial incisional or ventral hernia; reducible	\$775.93	J1	\$3,109.34	A2	\$1,377.21
49561	Repair initial incisional or ventral hernia; incarcerated or strangulated	\$977.67	J1	\$3,109.34	A2	\$1,377.21
49565	Repair recurrent incisional or ventral hernia; reducible	\$807.69	J1	\$4,833.71	A2	\$2,194.07
49566	Repair recurrent incisional or ventral hernia; incarcerated or strangulated	\$986.69	J1	\$4,833.71	A2	\$2,194.07
+49568*	Implantation of mesh or other prosthesis for incisional or ventral hernia repair or mesh for closure of debridement for necrotizing soft tissue infection (List separately in addition to code for the incisional or ventral hernia repair)	\$281.50	N	Packaged	N1	Packaged
49570	Repair epigastric hernia (eg, preperitoneal fat); reducible (separate procedure)	\$437.41	J1	\$3,109.34	A2	\$1,377.21
49572	Repair epigastric hernia (eg, preperitoneal fat); incarcerated or strangulated	\$543.51	J1	\$3,109.34	A2	\$1,377.21

(Table continues on next page)

CPT Code	Description	Physician (Facility)	Hospital Outpatient		Ambulatory Surgical Center (ASC)	
		Payment	Status Indicator	Payment	Status Indicator	Payment
Inguinal, Lumbar, Ventral, Umbilical, Spigelian & Epigastric Hernia Repair						
49580	Repair umbilical hernia, younger than age 5 years; reducible	\$349.71	J1	\$3,109.34	A2	\$1,377.21
49582	Repair umbilical hernia, younger than age 5 years; incarcerated or strangulated	\$507.06	J1	\$3,109.34	A2	\$1,377.21
49585	Repair umbilical hernia, age 5 years or older; reducible	\$467.72	J1	\$3,109.34	A2	\$1,377.21
49587	Repair umbilical hernia, age 5 years or older; incarcerated or strangulated	\$500.20	J1	\$3,109.34	A2	\$1,377.21
49590	Repair spigelian hernia	\$601.97	J1	\$3,109.34	A2	\$1,377.21
49650	Laparoscopy, surgical; repair initial inguinal hernia	\$451.12	J1	\$4,833.71	A2	\$2,194.07
49651	Laparoscopy, surgical; repair recurrent inguinal hernia	\$587.54	J1	\$4,833.71	A2	\$2,194.07
49652	Laparoscopy, surgical, repair, ventral, umbilical, spigelian or epigastric hernia (includes mesh insertion, when performed); reducible	\$782.78	J1	\$4,833.71	G2	\$2,194.07
49653	Laparoscopy, surgical, repair, ventral, umbilical, spigelian or epigastric hernia (includes mesh insertion, when performed); incarcerated or strangulated	\$977.31	J1	\$4,833.71	G2	\$2,194.07
49654	Laparoscopy, surgical, repair, incisional hernia (includes mesh insertion, when performed); reducible	\$888.89	J1	\$8,413.11	G2	\$3,588.58
49655	Laparoscopy, surgical, repair, incisional hernia (includes mesh insertion, when performed); incarcerated or strangulated	\$1,087.02	J1	\$8,413.11	G2	\$3,588.58
49656	Laparoscopy, surgical, repair, recurrent incisional hernia (includes mesh insertion, when performed); reducible	\$964.31	J1	\$8,413.11	A2	\$3,588.58
49657	Laparoscopy, surgical, repair, recurrent incisional hernia (includes mesh insertion, when performed); incarcerated or strangulated	\$1,390.17	J1	\$8,413.11	A2	\$3,588.58
49659	Unlisted laparoscopy procedure, hernioplasty, herniorrhaphy, herniotomy	By Report	J1	\$4,833.71	N/A	
Hiatal Hernia Repair						
39540	Repair, diaphragmatic hernia (other than neonatal), traumatic; acute	\$913.43	C	N/A	N/A	
39541	Repair, diaphragmatic hernia (other than neonatal), traumatic; chronic	\$986.33	C	N/A	N/A	
43280	Laparoscopy, surgical, esophagogastric fundoplasty (eg, Nissen, Toupet procedures)	\$1,136.10	J1	\$8,413.11	N/A	
43281	Laparoscopy, surgical, repair of paraesophageal hernia, includes fundoplasty, when performed; without implantation of mesh	\$1,624.75	J1	\$8,413.11	N/A	

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* With the exception of the incisional hernia repair codes (49560-49566), the use of mesh or other prostheses is not separately reported. The use of mesh or other prosthesis is considered inherent to all laparoscopic hernia repairs (49650-49657) and to some of the open hernia repair codes, including inguinal (49491-49525), lumbar (49540), femoral (49550-49557), epigastric (49570-49572), umbilical (49580-49587), and spigelian (49590). 2020 CPT Professional Edition

Hiatal Hernia Repair					
43282	Laparoscopy, surgical, repair of paraesophageal hernia, includes fundoplasty, when performed; with implantation of mesh	\$1,826.86	J1	\$8,413.11	N/A
+43283	Laparoscopy, surgical, esophageal lengthening procedure (eg, Collis gastroplasty or wedge gastroplasty) (List separately in addition to code for primary procedure)	\$166.01	C	N/A	N/A
43332	Repair, paraesophageal hiatal hernia (including fundoplication), via laparotomy, except neonatal; without implantation of mesh or other prosthesis	\$1,216.58	C	N/A	N/A
43333	Repair, paraesophageal hiatal hernia (including fundoplication), via laparotomy, except neonatal; with implantation of mesh or other prosthesis	\$1,328.82	C	N/A	N/A
43334	Repair, paraesophageal hiatal hernia (including fundoplication), via thoracotomy, except neonatal; without implantation of mesh or other prosthesis	\$1,307.17	C	N/A	N/A
43335	Repair, paraesophageal hiatal hernia (including fundoplication), via thoracotomy, except neonatal; with implantation of mesh or other prosthesis	\$1,398.47	C	N/A	N/A
43336	Repair, paraesophageal hiatal hernia (including fundoplication), via thoracoabdominal incision, except neonatal; without implantation of mesh or other prosthesis	\$1,516.85	C	N/A	N/A
43337	Repair, paraesophageal hiatal hernia (including fundoplication), via thoracoabdominal incision, except neonatal; with implantation of mesh or other prosthesis	\$1,618.62	C	N/A	N/A
43338*	Esophageal lengthening procedure (eg, Collis gastroplasty or wedge gastroplasty) (List separately in addition to code for primary procedure)	\$121.62	C	N/A	N/A
Parastomal Hernia Repair					
44346	Revision of colostomy; with repair of paracolostomy hernia (separate procedure)	\$1,240.04	C	N/A	N/A

* With the exception of the incisional hernia repair codes (49560-49566), the use of mesh or other prostheses is not separately reported. The use of mesh or other prosthesis is considered inherent to all laparoscopic hernia repairs (49650-49657) and to some of the open hernia repair codes, including inguinal (49491-49525), lumbar (49540), femoral (49550-49557), epigastric (49570-49572), umbilical (49580-49587), and spigelian (49590). 2020 CPT Professional Edition

+ Add-on code

A2 - Surgical procedure on ASC list in CY 2007; payment based on OPPS relative payment weight

C - Not paid under outpatient; inpatient procedure only

G2 - Non office-based surgical procedure added in CY 2008 or later; payment based on OPPS relative payment weight

J1 - Paid under OPPS. Hospital Part B services paid through Comprehensive APC; all covered Part B services are packaged with primary "J1" service, except services with OPPS SI = F, G, H, L, and U; ambulance services; diagnostic and screening mammography; all preventive services; and certain Part B inpatient services

N - Items and services are packaged into payment for other services

N1 - Packaged service/item; no separate payment made

HCPCS "C" Codes:

Product, Hospital Outpatient

"C" codes are only reported by hospitals. When devices are used in combination with associated procedures provided in the outpatient setting, hospitals report these codes for Medicare patient procedures. While the following codes are not paid separately from the procedure, reporting these codes and assignment of charges identify device-related costs. This is important for future rate-setting by Medicare. Private payers' policies vary if they require the use of these "C" codes or the "Q" code.

The following table includes examples of potential HCPCS procedure codes that are available to hospitals when reporting surgical procedures.

HCPCS Code	Definition	Medicare Payment
C1781 Mesh (implantable)	A mesh implant or synthetic patch composed of absorbable or non-absorbable material that is used to repair hernias, support weakened or attenuated tissue, cover tissue defects, etc.	Packaged service/item; no separate payment made
C1763 Connective tissue, non-human (includes synthetic)	Connective tissue, non-human (includes synthetic) - These tissues include a natural, acellular collagen matrix typically obtained from porcine or bovine small intestinal submucosa, or pericardium. This bio-material is intended to repair or support damaged or inadequate soft tissue. They are used to treat urinary incontinence resulting from hypermobility or Intrinsic Sphincter Deficiency (ISD), pelvic floor repair, or for implantation to reinforce soft tissues where weakness exists in the urological or musculoskeletal anatomy.	
Q4100 Skin substitute, not otherwise classified.	Unclassified HCPCS code that may be used to describe both synthetic and other non-human connective tissues that do not have a unique HCPCS code.	

Hospital Inpatient Codes and Payments:

Medicare uses a prospective payment system to reimburse hospitals for inpatient services based on Medicare Severity Diagnosis Related Groups (MS-DRGs). Services are classified into clinically cohesive groups that exhibit similar use of hospital resources. Hospitals receive a single payment for all services provided during an inpatient admission based on the MS-DRG assigned, regardless of the actual length of stay or costs of services. Only one MS-DRG may be assigned per patient stay. The MS-DRG assignment to the categories of Complications or Comorbidities (CCs) and/or Major Complications or Comorbidities (MCCs) is influenced by the medical record documentation describing the clinical circumstances. Diagnoses and procedures are reported with ICD-10 procedure codes.

The following code list has examples of potential ICD-10 procedure codes that are available for hospitals when reporting inpatient hernia procedures.

Hernia Procedures	Operating Room Procedures
0DV40ZZ	Restriction of Esophagogastric Junction, Open Approach
0BQT0ZZ	Repair Diaphragm, Open Approach
0BQT4ZZ	Repair Diaphragm, Percutaneous Endoscopic Approach
0BUT0KZ	Supplement Diaphragm with Nonautologous Tissue Substitute, Open Approach
0D1K0Z4	Bypass Ascending Colon to Cutaneous, Open Approach
0D1L0Z4	Bypass Transverse Colon to Cutaneous, Open Approach
0D1M0Z4	Bypass Descending Colon to Cutaneous, Open Approach
0D1N0Z4	Bypass Sigmoid Colon to Cutaneous, Open Approach
0DQ54ZZ	Repair Esophagus, Percutaneous Endoscopic Approach
0DU64KZ	Supplement Stomach with Nonautologous Substitute, Percutaneous Endoscopic Approach
0DV44ZZ	Restriction of Esophagogastric Junction, Percutaneous Endoscopic Approach
0VB50ZZ	Excision of Scrotum, Open Approach
0WBFXZ2	Excision of Abdominal Wall, Stoma, External Approach
0WQF0ZZ	Repair Abdominal Wall, Open Approach
0WQF3ZZ	Repair Abdominal Wall, Percutaneous Approach
0WQF4ZZ	Repair Abdominal Wall, Percutaneous Endoscopic Approach
0WQFXZ2	Repair Abdominal Wall, Stoma, External Approach
0WQFXZ2	Repair Abdominal Wall, External Approach
0WUF0KZ	Supplement Abdominal Wall with Nonautologous Tissue Substitute, Open Approach
0WUF4KZ	Supplement Abdominal Wall with Nonautologous Tissue Substitute, Percutaneous Endoscopic Approach

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Hernia Procedures	Operating Room Procedures
0YQ50ZZ	Repair Right Inguinal Region, Open Approach
0YQ54ZZ	Repair Right Inguinal Region, Percutaneous Endoscopic Approach
0YQ60ZZ	Repair Left Inguinal Region, Open Approach
0YQ64ZZ	Repair Left Inguinal Region, Percutaneous Endoscopic Approach
0YQA0ZZ	Repair Bilateral Inguinal Region, Open Approach
0YQA4ZZ	Repair Bilateral Inguinal Region, Percutaneous Endoscopic Approach
0YU50KZ	Supplement Right Inguinal Region with Nonautologous Substitute, Open Approach
0YU54KZ	Supplement Right Inguinal Region with Nonautologous Substitute, Percutaneous Endoscopic Approach
0YU60KZ	Supplement Left Inguinal Region with Nonautologous Substitute, Open Approach
0YU64KZ	Supplement Left Inguinal Region with Nonautologous Substitute, Percutaneous Endoscopic Approach
0YUA0KZ	Supplement Left Bilateral Region with Nonautologous Substitute, Open Approach
0YUA4KZ	Supplement Bilateral Inguinal Region with Nonautologous Substitute, Percutaneous Endoscopic Approach

MS-DRGs - Hospital Inpatients

MS-DRGs are assigned using the principal diagnosis and additional diagnoses, the principal procedure and additional procedures, and sex and discharge status. The MS-DRGs provided represent the most likely assignment for a patient admitted for hernia surgery. Gentrix product payment is included in the MS-DRG payment; may be identified on the hospital claim using the HCPCS and/or revenue code; captured as a surgical supply for hospital cost accounting.

The 2019 Medicare payment rates, listed in the table below, are national unadjusted payment rates. Check with your MAC for payment rates specific to your region.

MS-DRG	Description*	Payment**
Inguinal, Lumbar, Ventral, Umbilical, Spigelian & Epigastric Hernia Repair		
350	Inguinal and femoral hernia procedures with mcc	\$15,060.77
351	Inguinal and femoral hernia procedures with cc	\$9,003.87
352	Inguinal and femoral hernia procedures without cc/mcc	\$6,648.40
353	Hernia procedures except inguinal and femoral with mcc	\$18,318.29
354	Hernia procedures except inguinal and femoral with cc	\$10,632.62
355	Hernia procedures except inguinal and femoral without cc/mcc	\$8,473.50
Hiatal Hernia Repair		
326	Stomach, esophageal and duodenal procedures with mcc	\$32,541.23
327	Stomach, esophageal and duodenal procedures with cc	\$15,885.65
328	Stomach, esophageal and duodenal procedures without cc/mcc	\$9,724.40
Parastomal Hernia Repair		
347	Anal and stomal procedures with mcc	\$16,277.71
348	Anal and stomal procedures with cc	\$8,701.33
349	Anal and stomal procedures without cc/mcc	\$6,056.29

* Comorbidities and Complications/Major Comorbidities and Complications (cc/mcc)

** DRG values calculated using a base rate of \$5,711.89 and Capital Standard Payment of \$462.33. The national average hospital Medicare base rate is an average of the sum of four categories: Hospital Submitted Quality Data and is a Meaningful EHR User, Hospital Did NOT Submit Quality Data and is a Meaningful EHR User, Hospital Submitted Quality Data and is NOT a Meaningful EHR User, Hospital Did NOT Submit Quality Data and is NOT a Meaningful EHR User. This information is provided as a benchmark reference only. There is no official publication of the average hospital base rate; therefore, the national average payments provided are approximate. Actual reimbursement will vary by geographic region, status as a teaching facility, share of low-income patients, status of submitting quality data, status as a meaningful electronic health user, participation in the Hospital Value-Based Purchasing (VBP), and Hospital Readmissions Reduction Program (HRRP). Calculations were based on data provided in FY 2020 IPPS Final Rule CN (Tables 1A, 1D, and 5CN)



The ACell Reimbursement Support Center

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ACell's Reimbursement Support Center is dedicated to providing answers to all of your reimbursement questions. Services available for all ACell products include benefit verification, prior authorizations, claim appeals, and general coding and billing questions.



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