Correct coding for complex abdominal wall reconstruction and hernia repair continues to cause surgeons a great deal of confusion. In particular, much confusion exists regarding coding for mesh repair. The American College of Surgeons (ACS) Coding Hotline has received numerous queries about these procedures. Similarly, participants at ACS Coding Workshops have expressed confusion. This article addresses some of the more difficult questions about coding for abdominal wall repair.

**Hernia repair**

Hernia repair includes isolation and dissection of the hernia sac, reduction of intraperitoneal contents, fascial repair, and soft tissue closure. The use of mesh or other prosthesis is considered inherent to the repair of inguinal hernia (49491–49525), and the implantation of mesh is not separately reportable. In the case of epigastric (49570–49572), umbilical (49580–49587), and Spigelian (49590) hernias, the placement of mesh or other prosthesis, if performed, is inherent to the repair and, therefore, not separately reportable.

The implantation of mesh or other prosthesis add-on code 49568, *Implantation of mesh or other prosthesis for open 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)*, can be reported with the repair of incisional or ventral hernias (49560–49566), when performed. This add-on code applies to any type of mesh or other prosthesis—whether synthetic, biologic, or otherwise. To be clear, when used appropriately as an add-on to hernia repair codes 49560–49566, code 49568 represents any type of mesh or other prosthesis, whether autograft, dermal graft, xenograft, or an as yet to be imagined graft. In addition, code 49568 includes the work of placing the mesh, independent of the size of mesh used. With respect to reporting and reimbursement for the implant, it is the facility’s responsibility to report the type and size of mesh used.

### Hernia repair

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>49560</td>
<td>Repair initial incisional or ventral hernia; reducible</td>
</tr>
<tr>
<td>49568</td>
<td>Implantation of mesh or other prosthesis for open 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)</td>
</tr>
</tbody>
</table>

**Coding highlight**

How do you code a primary reducible incisional hernia repair, bilateral component separation, and the implantation of mesh?

Component separation is also known as the “separation of parts operation.” The muscle flap code 15734 is the appropriate code to report; it is reported twice to represent the mobilization of the musculo-fascial flap on both sides. The reducible incisional hernia repair is reported with code 49560. The implantation of mesh is correctly reported with add-on code 49568 because the hernia is incisional. These services should be reported as follows:

- 15734, *Muscle, myocutaneous, or fasciocutaneous flap; trunk*
- 15734–59, *Muscle, myocutaneous, or fasciocutaneous flap; trunk*
- 49560, *Repair initial incisional or ventral hernia; reducible*
- 49568, *Implantation of mesh or other prosthesis for open 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)*

How do you code the excision of a 9 cm sarcoma in the external oblique muscle of the abdominal wall with complex closure and implantation of mesh?

Report code 22905 for the excision of the sarcoma. If the patient is a Medicare beneficiary, complex repair is not separately reportable. However, complex repair is separately reportable for non-Medicare patients and is reported with codes 13101 and 13102. Unlisted code 22999 is the appropriate code to report for the implantation of mesh. When an unlisted code is reported to describe a service, it will be necessary to submit supporting documentation along with the claim to provide an adequate description of the nature, extent, and need for the procedure. These services should be reported as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>22905</td>
<td>Excision of soft tissue, necrotizing infections</td>
</tr>
<tr>
<td>22999</td>
<td>Unlisted code for excision of a 9 cm sarcoma in the external oblique muscle of the abdominal wall with complex closure and implantation of mesh</td>
</tr>
</tbody>
</table>

continued on page 44
### Coding highlight (continued)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>22905</td>
<td>Radical resection of tumor (eg, malignant neoplasm), soft tissue of abdominal wall, 5 cm or greater</td>
</tr>
<tr>
<td>13101</td>
<td>Repair, complex, trunk; 2.6 cm to 7.5 cm</td>
</tr>
<tr>
<td>13102</td>
<td>Repair, complex, trunk; each additional 5 cm or less (List separately in addition to code for the incisional or ventral hernia repair)</td>
</tr>
<tr>
<td>22999</td>
<td>Unlisted procedure, abdomen, musculoskeletal system</td>
</tr>
</tbody>
</table>

#### How do you code laparoscopic repair of a hiatal hernia with implantation of mesh?

If this is a Type I or sliding hiatal hernia as seen with the great majority of anti-reflux operations, then code 43280 is reported. Placement of mesh is not typical or inherent to this operation, and no scientific data justify its routine use at present. In this instance, report unlisted code 49659 and include the value of the extra work for implanting the mesh. The type and size of mesh will be reported by the facility. Note that the components of repairing a paraesophageal hernia (Type II or III hiatal hernia) are specific and do not apply to the more common fundoplication for gastroesophageal reflux disease. If the operation is a laparoscopic repair of a paraesophageal hernia with all of its inherent steps (sac dissection and removal, esophageal mobilization, and so on), then code 43282, Laparoscopy, surgical, repair of paraesophageal hernia, includes fundopasty, when performed; with implantation of mesh, is reported. These services should be reported as follows:

- **Type I or sliding hiatal hernia repair with mesh:**
  - 43280, Laparoscopy, surgical, esophagogastroduodenostomy (eg, Nissen, Toupet procedures)
  - 49659, Unlisted laparoscopy procedure, hernioplasty, herniorrhaphy, herniotomy

- **Type II or III hiatal hernia repair with mesh:**
  - 43282, Laparoscopy, surgical, repair of paraesophageal hernia, includes fundopasty, when performed; with implantation of mesh

#### How do you code the repair of a recurrent parastomal hernia with implantation of 300 sq cm of human acellular dermal graft?

Report code 44346 for the repair. Placement of mesh is not typical or inherent for this procedure and, therefore, can be reported separately. Because the mesh is implanted to support the abdominal wall, the unlisted code 22999, Unlisted procedure, abdomen, musculoskeletal system should be reported and not code 49999, Unlisted procedure, abdomen, peritoneum and omentum. These services should be reported as follows:

- 44346, Revision of colostomy, with repair of paracolostomy hernia (separate procedure)
- 22999, Unlisted procedure, abdomen, musculoskeletal system

#### How do you code the repair of an initial incarcerated inguinal hernia with or without implantation of mesh?

The appropriate code to report the service is 49507. Implantation of mesh is not separately reportable because it is inherent in all of the inguinal hernia repair codes. This applies to any type of mesh, whether synthetic, biologic, or otherwise. Reporting an additional code for mesh placement represents incorrect coding. These services should be reported as follows:

- 49507, Repair initial inguinal hernia, age 5 years or older; incarcerated or strangulated

#### How do you code the repair of bilateral ventral hernias and an incarcerated umbilical hernia?

The current surgical teaching for abdominal wall hernia repair would recommend the placement of mesh as opposed to primary repair. The tenets of repair also describe a single piece of mesh with overlap to cover all the defects, whether single or multiple. The coding process would not be affected if there were multiple incisional or “ventral” defects or an additional umbilical defect. In fact, it is common when repairing an incisional hernia to find multiple defects. The surgeon should report 49561 and, if mesh is used, then the add-on code 49568 should also be reported. Because it is likely that the mesh would cover all the defects, reporting these two codes would be appropriate for all work. It would be exceedingly unusual for a surgeon to place two separate pieces of mesh for the reasons mentioned above. However, if two distinct defects were repaired and mesh was implanted—for example, an incisional defect from previous flank incision and concomitant incisional defect for low suprapubic incision, where the surgeon implants two separate distinct pieces of mesh or two distinctly separate repairs—then two codes can be submitted along with modifier 51. Obviously, it would be inappropriate to place separate pieces of mesh for each defect solely for the purpose of increasing reimbursement. These services should be reported as follows:

- 49561, Repair initial incisional or ventral hernia; incarcerated or strangulated
- 49568, Implantation of mesh or other prosthesis for open 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)
How do you code the removal of infected mesh, debride-
ment of fascia, component separation, segmental small
bowel resection, and implantation of mesh?

Resection of bowel is reported with code 44120. Separation
of components is reported with the trunk muscle flap code
15734 (see earlier discussion, the first question in the coding
highlights section). The removal of infected mesh is reported
with codes 11005 and 11008. The implantation of mesh for
closure of debridement for necrotizing soft tissue infection is
reported with code 49568. Codes 11008 and 49568 are add-on
codes and thus, modifier 51 exempt. These services should be
reported as follows:

44120, Enterectomy, resection of small intestine; single
resection and anastomosis

15734, Muscle, myocutaneous, or fasciocutaneous flap; 
trunk

11005, Debridement of skin, subcutaneous tissue, muscle
and fascia for necrotizing soft tissue infection; abdominal
wall, with or without fascial closure

11008, Removal of prostatic material or mesh, abdominal
wall for infection (eg, for chronic or recurrent mesh infection
or necrotizing soft tissue infection) (List separately in addition
to code for primary procedure)

49568, Implantation of mesh or other prosthesis for open
incisional or ventral hernia repair or mesh for closure of de-
bride andment for necrotizing soft tissue infection (List separately
in addition to code for the incisional or ventral hernia repair)

While performing a laparoscopic bariatric procedure, a
small hiatal hernia is discovered and repaired, and mesh
is placed. How is this reported?

The appropriate laparoscopic bariatric code would be re-
ported, and the unlisted laparoscopic code 49659 is appropriate
to report both the hiatal repair and the implantation of mesh.
These services should be reported as follows:

49659, Unlisted laparoscopy procedure, hernioplasty,
herniorrhaphy, herniotomy

Payor issues
Some caveats to remember (that may differ from Medicare
guidelines) when submitting the previous scenarios to private
payors include the following:
• Some payors software edit packages may bundle these
codes together; therefore, it may be appropriate to append
modifier 59 (distinct procedural service).
• Many payors (including Medicare) recommend against
reporting modifier 51 on claims. Their processing systems have
hard-coded logic to append the modifier automatically to the
appropriate codes on each claim)
• When an unlisted code is reported to describe a service,
it will be necessary to submit supporting documentation along
with the claim to provide an adequate description of the nature,
extent, and need for the procedure.
• Code descriptors and work valuation may be re-evaluated
as the scientific evidence supports changes in practice.

Dr. Senkowski
is professor of surgery, Mercer University School of
Medicine, Savannah, GA, and associate program director for the surgi-
cal residency program. He serves as the ACS advisor to the American
Medical Association’s Specialty Society Relative Value Scale Update
Committee.

Ms. Jackson
is Practice Affairs Associate, Division of Advocacy and
Health Policy, Washington, DC.

Codes in the Skin Replacement Surgery and Skin
Substitutes section of the 2011 *Current Procedural
Terminology* (CPT)* handbook (15040–15431), were
specifically created in 2005 for treatment of wounds
in burn and trauma patients. These codes were not
intended to be used for abdominal wall fascial repair
or fascial support; in other words, underlay or overlay
support. Specifically, 15330, Acellular dermal allografts,
trunk, arms, legs; first 100 sq cm or less, or 1% of body
area of infants and children, and 15430, Acellular xeno-
graft implant; first 100 sq cm or less, or 1% of body area
of infants and children, are not appropriately reported
for reconstruction of an abdominal wall hernia.

In the case of a strangulated hernia where other
organs are resected (for example, the intestine), ap-
propriate resection codes are reported separately in
addition to the hernia repair code.

If you have questions or comments regarding
this article, contact Jenny Jackson at jjackson@
facs.org or 202-672-1506. If you have additional
coding questions, contact the Coding Hotline at
800-227-7911 between 8:00 am 5:00 pm, CST,
excluding holidays.

*All specific references to CPT (Current Procedural Terminology)
terminology and phraseology are © 2010 American Medical Association.
All rights reserved.