Limb Reconstruction and Lengthening

Christopher A. Iobst, MD¹; Sarah Wiskerchen, MBA, CPC²; Ryan D. Muchow, MD³

¹Nationwide Children’s Hospital, The Ohio State University, Columbus, OH; ²KarenZupko & Associates, Inc., Chicago, IL; ³University of Kentucky, Lexington Shriners Hospital for Children, Lexington, KY

Introduction
This edition of the JPOSNA Coding Corner allows us to share in a conversation between our coding expert, Sarah Wiskerchen (SW) from KarenZupko Associates, Inc. (KZA), and one of our Society’s leaders in limb lengthening and reconstruction, Christopher A. Iobst, MD (CAI). The questions are absolutely on point in order to help us navigate the world of osteotomies and external fixators while the answers provide clarity and direction for proper billing and documentation of the management of these complicated patients. Enjoy the dialogue and ensure you understand the proper difference between an osteotomy and an osteoplasty by conversation’s end!

Today I have the pleasure of speaking with Sarah Wiskerchen, consultant and speaker for KZA. She has 27 years of experience working with orthopaedic surgery coding and has agreed to discuss with us some of the common coding concerns that face limb lengthening and limb reconstruction surgeons.

CAI: Sarah, thank you for taking the time to speak with us about these issues.

SW: It is my pleasure. I will do my best to answer your coding questions.

CAI: OK, let’s jump right in. Many limb reconstruction patients return on a weekly basis postoperatively to monitor their gradual limb lengthening or limb deformity correction using a medical device (external fixator or intramedullary lengthening nail). Although these visits fall under the global postoperative period, the surgeon is actively treating and monitoring the patient’s correction/lengthening. Is it possible to bill for these postoperative visits rather than just lumping them under the generic postop CPT code of 99024?

SW: The CPT Surgical Package Definition says that “typical postoperative follow-up care” is included in the surgical procedure. Because these visits are expected, we consider them not separately reportable. CMS’s global surgical package definitions are even more restrictive and include “all follow-up visits during the postoperative period of the surgery that are related to recovery from the surgery.”

With that said, if the number of postoperative visits exceed typical expectations, the practice could consider adding or appending unusual services modifier 22 to the surgical CPT code. For reference, the CMS relative values for codes 27466 and 27715, which represent lengthening osteoplasty of the femur and tibia/fibula respectively, include 5 (27466) and 4.5 (27715) 99212-level visits. If the patient is expected to need 10-12 visits, then modifier 22 could be used to describe that additional care.

CAI: Wow, that is very helpful advice. Many patients will have greater than five visits, so the ability to add the modifier to their care will help surgeons get more credit for the work they are doing. Where would you find the information for the number of postoperative visits connected to other codes?
**SW:** This is published by CMS as a component of the Medicare Physician Fee Schedule Final Rule each year. In 2021, it is titled “CY 2021 PFS Final Rule Physician Time.” First locate the Medicare Physician Fee Schedule page at [www.cms.gov](http://www.cms.gov), and then look at the downloads list for the appropriate calendar year for the various supporting files and tables. This link should take you to the lists for 2021: [https://www.cms.gov/medicare-fee-service-payment/physicianfeesched/pfs-federal-regulation-notices/cms-1734-f](https://www.cms.gov/medicare-fee-service-payment/physicianfeesched/pfs-federal-regulation-notices/cms-1734-f).

**CAI:** Next question: The surgeon may spend substantial time analyzing the patient’s clinical and radiographic deformity and planning the case, such as pre-building the external fixator, after the patient has left the clinic. Is there any way to bill for this time?

**SW:** The CPT vignettes for the external fixation codes include a combination of pre-service, intra-service, and post-service work. The pre-service work includes obtaining preoperative x-rays to accurately measure and analyze the deformity. The CMS-assigned relative values for the multiplane external fixator codes, 20692 and 20696, are valued to include 70 and 33 minutes of pre-service evaluation time, respectively.

**CAI:** That’s too bad. Is there a way to include this time by upcoding the patient’s visit level and documenting that this additional work will be included?

**SW:** When choosing an office E/M code level of service based upon time, only services performed on the date of the E/M are reportable. Further, this work is related to the procedure code which cannot be counted toward E/M time.

**CAI:** Another common question is whether the surgeon can bill for the use of the intraoperative fluoroscopy machine guiding the surgery.

**SW:** Under AAOS guidelines, intraoperative supervision and positioning of imaging by the operating surgeon is inclusive to the surgical procedure. If fluoroscopy is used intraoperatively for surgical decision-making or guidance, it would not be separately reportable.

**CAI:** OK, let’s change gears for a moment. I have noticed that there are multiple codes for either a femoral or tibial osteotomy/osteoplasty. Can you please explain what is the exact difference between an osteotomy and an osteoplasty? Is there a minimum amount of lengthening that must happen to qualify for the osteoplasty code?

**SW:** The difference between the osteotomy and osteoplasty codes is the element of lengthening or shortening, but no minimum amount of lengthening is defined in CPT. When osteotomy is performed for angular correction, osteotomy codes are used, such as 27448, 27450, 27705/27709, and 27455/27457. When osteotomy is performed for lengthening, the CPT codes use the descriptor “osteoplasty.” Code 27466 is used for the femur (Osteoplasty, femur, lengthening), and code 27715 for the tibia and fibula (Osteoplasty, tibia and fibula, lengthening or shortening). If osteoplasty of the humerus is performed for lengthening with an external fixator, code 24420 applies (Osteoplasty, humerus (e.g., shortening or lengthening) [excluding 64876]).

One exception is when osteotomy is performed in the humerus with insertion of an externally controlled intramedullary lengthening device. This service is now reported using category III CPT code 0594T (Osteotomy, humerus, with insertion of an externally controlled intramedullary lengthening device, including intraoperative imaging, initial and subsequent alignment assessments, computations of adjustment schedules, and management of the intramedullary lengthening device). Note that the description uses the word osteotomy instead of osteoplasty; the remainder of the description makes clear that the procedure is performed for lengthening.

At this time, CPT does not include either category I or category III codes for the insertion of externally controlled intramedullary lengthening devices in the femur or tibia. CPT applications for category I codes for the femur and tibia were considered by the AAOS Coding Coverage & Reimbursement Committee (CCRC) in 2019 but were ultimately withdrawn fearing that new codes might create changes to the values of the current lengthening codes that would not be in the best interest.
of its members. POSNA members with questions about the CPT process for new codes should contact Kevin Neal, MD, the POSNA representative to the AAOS CCRC at Kevin.Neal@nemours.org.

**CAI:** Let’s spend a few moments talking about external fixators. There are several different types of fixators and fixator codes. For example, uniplanar external fixator application has two main codes, 20690 and 20692. What is the minimum amount of pin divergence necessary to qualify for 20690 vs. 20692?

**SW:** Codes 20690 and 20692 are described as uniplane and multiplane external fixation devices, respectively. A ringed external fixator is one example of a multiplanar device (20692). The codes are not specifically defined in terms of pin divergence. If the multiplane device uses stereotactic computer-assisted adjustment, then code 20696 is used.

**CAI:** So, in other words, the type of frame dictates the code, not the position of the pins, i.e., uniplanar fixators get 20690, circular or ring fixators get 20692, and hexapod fixators get 20696?

**SW:** Yes, if the hexapod fixators all use stereotactic computer-assisted adjustment. We recommend that readers check out your webinar (Hexapod External Fixator Deformity Correction, POSNAcademy).

**CAI:** What if an external fixator is attached to multiple locations? Can you bill for each one separately, i.e., many times the fixator is concurrently attached to the tibia/ankle/foot, is this one frame or two/three frames?

**SW:** The application of any external fixation system is reportable once per system, not per attachment site. If separate external fixation systems are used at the sites of separate osteotomies/osteoplasties, such as one at the femur and one at the tibia/fibula, then both systems would be reportable.

**CAI:** If an external fixator is used as a tool in the operating room (fixator assisted nailing or fixator assisted plating) where the fixator is applied and removed while the patient is asleep, is there any way to code/bill for this work?

**SW:** When used as an operative tool, this would be inclusive to the surgical procedure and is not separately reportable.

**CAI:** Another common situation for limb reconstruction surgeons involves the removal of external fixator pins or wires in clinic over the course of treatment. Is there a way to bill for this procedure?

**SW:** Adjustment or revision of an external fixator is reportable using CPT code 20693 when anesthesia is required (Adjustment or revision of external fixation system requiring anesthesia (e.g., new pin(s) or wire(s) and/or new ring(s) or bar(s)). If the adjustment is performed in the office without the use of anesthesia, then 20693 is not applicable. From a CPT perspective, “with anesthesia” indicates that the procedure requires general, regional, or monitored anesthesia care (MAC). (Source: CPT Assistant, December 2006)

**CAI:** Does that billing/coding situation change if the patient chooses to have the entire fixator removed in clinic rather than going back to the operating room?

**SW:** Because the CPT code includes the definition “under anesthesia,” removal of the external fixator in the office is not reportable using code 20694 (Removal, under anesthesia, of external fixation system) unless general, regional, or MAC is used.

**CAI:** The final category of questions involves the use of internal lengthening nails. When inserting an intramedullary lengthening nail for femoral or tibial lengthening, is there any code that can be used for the nail insertion portion of the case, or is the osteoplasty code the only code that is allowed in this setting?

**SW:** As noted above, the osteoplasty codes were originally defined for a surgical technique that did not involve nail insertion. Despite this, because the procedure is performed for lengthening, it would not be correct to report a separate code for nail insertion.
CAI: So, to be clear, for a routine femoral lengthening with an internal lengthening nail, the 27466 code for femoral osteoplasty is the only code the surgeon is allowed to use?

SW: At this time, yes. Key is that the CPT code for femoral osteoplasty (technically osteotomy for lengthening) is method-neutral, so whether you are achieving lengthening through osteotomy (with external fixation) or through placement of a lengthening nail, code 27466 would be appropriate. For reference, the 2021 CMS work and total facility RVUs for code 27466 are 17.28 and 34.94. By comparison, the 2021 work and total facility RVUs for code 27506, which describes placement of an IM nail for femur fracture, are 19.65 and 39.42. Notably, code 27506 is valued to include external fixation when it is used, whereas code 27466 does not include external fixation, and that service would be separately reportable when used.

CAI: Many internal lengthening nail cases involve the placement of blocking screws. Is there any way to bill for the insertion of a blocking screw?

SW: This gets into the gray zones for lengthening procedures. In the AAOS guidelines for the osteoplasty codes there is no mention of placing a blocking screw because they were not originally created to describe placing an intramedullary device. If the purpose is to guide the nail and/or to prevent nail translation, it would be an included, albeit optional, part of the procedure. I think at most I’d use modifier 22 if it is not used routinely.

CAI: Sarah, thank you for your time and your very informative answers. I hope this helps to make the process of coding limb lengthening and reconstruction cases a little clearer for orthopedic surgeons. As a final question, is there a person or resource that the surgeon can contact if they have further coding/billing questions on this topic?

SW: Kevin Neal, MD, (email above) is available as a resource to POSNA members and can provide guidance if the questions require additional input from the AAOS Coding, Coverage, & Reimbursement Committee.

Additional Link
- To look up the number of postoperative visits that are included in a given CPT’s global period: https://www.cms.gov/medicaremedicare-fee-service-paymentphysicianfeeschedpfs-federal-regulation-notices/cms-1734-f.