Pediatric VAD Billing Guide

Billing Guide for Pediatric Patients Supported on Advanced Heart Assist Technologies

BACKGROUND

This guide is meant to be an introduction to billing practices with the hopes that you and your institution are receiving the proper reimbursement for the work that you do.

Compensation for medical services provided can be divided based on the location of the patient (inpatient vs. outpatient), and by the entity being compensated-the physician vs. the organization/hospital.

This guide will discuss both environments and touch on the compensation for both entities.

INPATIENT BILLING

Professional Services — Physicians

While only physicians are covered here, nurse practitioners and other advanced care providers can submit professional bills for services according to their training and licensure. This varies somewhat by state and institution so please check with your billing office to see what documentation requirements there are and what services can be billed for independently by non-physician providers.

Medical Providers

Medical services provided by providers include the gathering of data, assessment of the information, and plan for treatment. In general, as there is no physical work product (i.e. non-surgical providers don't remove the appendix), the billing of medical services needs to be supported by written documentation. This written documentation is than abstracted in most organizations by billing experts trained in medical coding to see what diagnoses (ICD-10 codes) can be assigned to the patient and use a CPT (Current Procedural Terminology) code to bill for the services provided. There are guidelines for every CPT code as to what information is required to be documented in order to fulfill the requirements for the code. In general, within our field, the majority of inpatient billing occurs under CPT codes covering daily services for acute hospital care, consultation of care within the hospital, and critical care.

Daily charges are reasonably standard and will vary in each institution depending on the status of the patient (critically ill vs. acute care) and whether you are the primary service or a consultant. Those charges are handled routinely by institutions and are not unique to patients on circulatory support. What is important to know is the codes for daily care and consultative services are "bundled" with many of the things that are done routinely. For example, the critical care codes for patients less than 5 years of age are "bundled" to include many of the routine procedures and management that occurs as part of critical care. Intubation, line placement, chest tube placement are all bundled procedures and are not able to be billed separately from the daily critical care charge. There are a few activities that can be billed for separately. Notably in this realm, ECMO management is billed for separately with its own CPT codes (different codes for VA and VV ECMO).

Management of heart assist or circulatory support devices are likewise not "bundled". Unfortunately, there is only one CPT code that covers this activity: 93750 Interrogation of ventricular assist device. I say unfortunately as this code is underweighted in most

cases. ECMO management codes typically produce charges in the thousands of dollars ($7037 in Wisconsin on last review), while the VAD interrogation charge typically is less than a hundred dollars. While it is important to realize what is charged and what is reimbursed or actually paid are generally two very different things, I think most would agree that the unique medical decision making /expertise involved in the care of a critically ill patient on circulatory support should not be worth 1/100 of that involved in a similar patient on ECMO.

What strategies have institutions done to address this gap?

One strategy is that the VAD interrogation code is not a "daily" charge. It can be charged anytime a "physician or other qualified health care professional analyzes device parameters (eg, drivelines, alarms, power surges), reviews the device function (eg, flow and volume status, septum status, recovery), programs the device, and reports". Several institutions have made it routine practice to document the interrogation of the device with every shift or every service (ICU, Cardiology, CT Surgery). It's a quick note that documents the VAD settings and any changes made. By submitting the code multiple times a day, this effectively helps to compensate for the low charge of the code and with 2-4 charges a day, starts to equalize the time spent with reimbursement provided. Several institutions including the University of Florida at Gainesville, Boston Children's and Nationwide Children's Hospital in Columbus use this strategy submitting the interrogation code up to times a day for the same patient to reflect the complexity of care involved in management.

Another strategy is to bill an "unlisted" code. Providers can charge for unlisted services under these codes for services not reasonably covered by standard codes. Several institutions have successfully billed for management of circulatory support under 93799: unlisted cardiovascular service or procedure. The documentation required for these codes includes a description of the service, justification for why it is not reasonably covered by other available codes and a reasonably comparable service code of a value in comparable RVU and/or percentage of a reasonably comparable CPT code.

In Milwaukee, we have been billing "Management of Heart Assist Device" under CPT 93799 with a qualifier of Acute vs. Chronic since 2012. A copy of the description of the services provided under these codes are:

> 0795DM-VAD management ACUTE, crosses to 93799-unlisted cardiovascular service | Daily management and interrogation of heart assist device in the context of a patient with complex or multisystem dysfunction. Documentation required includes assessment of heart assist device parameters (i.e. driveline, alarms, settings…), a review of the device function (i.e. flow/volume status, power usage, thrombosis potential…), and a description of how the device is functioning within the context of the patient's complex pathology. Examples of complex or multisystem dysfunction include patients requiring inotropic/vasoactive infusions, mechanical ventilation or non-invasive positive pressure ventilation, renal replacement therapy, multiple blood transfusions/pump exchange for thrombosis, intravenous nutrition for feeding intolerance, complex sedative medication titration, and/or antimicrobial therapy for suspected sepsis/infection related to device.
>
> 0794DM-VAD management CHRONIC, crosses to 93750-VAD interrogation | Daily management and interrogation of heart assist device in the context of a patient with single organ (cardiovascular) system dysfunction. Documentation required includes assessment of heart assist device parameters (i.e. driveline, alarms, settings…) and a review of the device function (i.e. flow/volume status, power usage, thrombosis potential…).

The comparable codes that we have reported are the ECMO management codes for the ACUTE management and the VAD interrogation code for the CHRONIC management. We created a templated note that includes the documentation requirements outlined in the code description. The response from payors regarding this code has been mixed. Some recognize it and reimburse at a surprisingly (almost shockingly if you consider the charge is over $7000/day) high rate. Others have reimbursements that seem more reasonable. A few have refused to recognize the code and despite appeals, have still reimbursed nothing. Overall, from 2012 through 2018 these codes have resulted in over $10 million in charges and $3.8 million in reimbursement in Milwaukee.

Two other institutions responded to our survey stating they also used "unlisted" codes for reimbursement, but I was not able to clarify with them what their practice or how their reimbursement was characterized.

Surgical Providers

Surgical services for procedures and implantation of devices are billed separately from medical services. The vast majority of surgical procedures are included within a "bundle" and include the post-operative recovery time services rendered by the surgical provider. For example, following a VSD repair the medical services provided for by the surgeon (and surgical team) as post-operative care are "bundled" in with the charge for the VSD surgical procedure. Ventricular assist devices and other mechanical circulatory support implantations are different and reasonably unique in that there are no post-operative days of care included with the surgical procedure. What this means is that the same surgical provider that inserts a ventricular assist device in a patient one day, can bill for medical services provided to that patient the next day and every subsequent day. Provided the surgical provider has written documentation that meets the requirements for the medical care provided, it can be billed for. I am not aware of any pediatric institution that have their surgeons routinely bill for medical services/management, but as there is no "exclusionary" period included with the VAD surgery it is allowable and would follow the same rules as outlined above for Medical Providers.

Hospital Billing

The rules governing hospital billing and how it works seems to be changing rapidly as the healthcare landscape and politics change. In the more traditional fee for service system, the daily hospital charge is based on the level of care provided (intensive care, telemetry, acute care…) with additional charges for medications, x-rays, and other supplies used that are not covered under the general room charge. Recently, many contracts have moved towards a pay for performance or other capitated type reimbursement. The basic premise for these models is that a certain amount is reimbursed given the patient's diagnosis and what the typical recovery time/cost is. For example, a typical neonate with an uncomplicated urinary tract infection is expected to stay 2-3 days in the acute care ward of the hospital. If you get them out earlier than that, your organization is rewarded, but if they stay longer or require more invasive services those charges are not reimbursed, and hospitals are thus incentivized to work efficiently and prevent complications. While very few contracts are fully one way or the other at the moment, many include aspects of both extremes of "fee for service" or "pay for performance".

What this typically means to us and our practice is that we need to document accurately to support the hospital billing. This is where things such as "Clinical Documentation Improvement" or CDI have spurned from. The hospital billing requires that a coder can accurately depict the patients diagnoses and severity of illness. I advise that you listen to your billing specialists and modify your documentation and note templates to help support their work. This does become as ridiculous as the difference between documenting "urosepsis" or "urinary tract infection with septic shock". The first term may map to a simple urinary tract infection and reimburse a 2–3 day hospital acute care stay while the second maps to a critically ill neonate with a 7–10 day hospital stay including several in the ICU.

OUTPATIENT BILLING

The outpatient billing of VAD services is very similar to the inpatient side except instead of daily codes with acute care, critical care and consult services; the codes reflect established vs. new patients and the time spent. As these codes are not unique to VAD patients, do what you normally do for billing office visits. In addition to these routine charges, interrogation of the VAD or management of the heart assist device can be billed separately. As described in the inpatient section, these codes will require specific written documentation which is the same on the outpatient side as the inpatient side. Several institutions have successfully

billed for the 93750 (VAD Interrogation) and 93799 (unlisted cardiovascular service) codes on outpatients.

Hospital or facility fees should not be different or unique for VAD patients, but if dressing changes or other procedures are done in clinic you may need to document the supplies used in order for the clinic to get reimbursed properly.

An area where we likely don't get reimbursed for what we do is related to all the non-clinic time spent on the care of these patients. Having someone on call to address issues. Going to their school and teaching the school nurse or teacher how to respond to an alarm or change a controller. These activities take a considerable amount of time and effort and I am not aware of any institution that is effectively getting reimbursement for these activities. Some suggestions are the use of Chronic Care Management codes (CPT 99490, 99487, and 99489) or using Prolonged Service Code modifiers (99358 and 99355). Both have specific time requirements and the prolonged service codes need to be associated with a regular office visit. If anyone uses these or knows of how these activities could be documented and charged for effectively please let me know, I would be happy to share it with the larger community.

Summary

CPT Code 93750 Interrogation of Ventricular Assist Device-can support inpatient and outpatient billing of assessing the device function and parameters. Generally, a low-level reimbursed code (under $100), but no defined limit as to number of times per day or number of providers per day that it can be charged for.

CPT Code 93799 Unlisted Cardiovascular Services-homegrown codes that require you to communicate with your professional billing department to utilize. Reimbursement is sporadic but can be useful to bridge the gap of the "undercharged" 93750 code and more accurately reflect the amount of work done to help manage these complex patients.

Hospital and facility billing rely on our documentation. Work with these coders so that your documentation accurately depicts the complexity of your patients and their severity of illness.

Surgeons are medical doctors as well, and a VAD procedure does not have a global lockout period. If the surgeon documents their contribution to the medical care of the patient, this can and should be billed for the same as the cardiologist or intensivist.

If you have any questions, I would be happy to discuss what we do and what I have learned others have done. Please contact me via email at rniebler@mcw.edu or put up a question on basecamp if it is something you think others can learn from.

Authors

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Disclaimer: The ACTION network is focused on quality improvement efforts such as harmonizing best practice protocols, disseminating them among institutions, and helping centers to improve care practices at the local level. This billing guide was developed as a consensus tool for pediatric VAD programs. The information in this guide is based on center practices, individual opinions, experiences, and, where available, published literature. Centers may choose to adapt this guide to include in their center-specific protocols with reference to ACTION with the understanding that this is meant as guidelines and not standard of care.

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