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The Evolution of the Orthopaedic Technologist

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We are all busy; Doctor's demands, sales representatives' calls, and even the residents need to be guided through the correct way to apply a Jones dressing. Now I'm going to tell you there is even more to do! Why? We'll get to that later, but let's just say so we evolve. It is a way to grow both professionally and personally. Take ten to fifteen minutes, four out of five workdays, and try to work on these four areas.

- Search out new and billable products, which will enhance your practice or hospital.
- Keep an open mind. Learn a new technique. A technique in casting that is not only beneficial for the practice, but also the patient.
- Learn the "back of the house"; research your billing, codes and reimbursements
- Format and institute a bi-annual soft good/ medical product supply bid.

These four projects may cost you more than an hour a week, but I can almost guarantee you will receive a fuller sense of worth from your physicians.

Search for Products

Let's all agree it's not easy to bring something new into a practice or hospital. The doctors know it, the salesmen know it, and the hospital administrators know it. You need to show that the product actually works and has billable merit. Billable merit- what does that mean? Basically, is the product billable and profitable? You do not have to make a lot of money on a medical product if the patient is helped. All you have to promise the administrators is that you will not lose money. The basic principle to follow is to show and document physical improvement. About four or five years ago, plantar fasciitis splints were all the rage. Night splinting became very profitable for quite a few medical companies. The foot and ankle doctors enjoyed the easy, positive reaction from patients and the results.

Happening upon a "Cubital Tunnel Night Splint" for the "Hand" for doctors can only make the orthopaedic

technologist look good. Here, we find a product that addresses a need for the patient that suffers from excessive irritation of the ulnar nerve either from incorrect positioning or the continuous over flexion or extension of the elbow joint. The ulnar nerve can be irritated and a full-fledged numbness of the fourth and fifth finger can occur. Wearing the "Cubital Tunnel Night Splint" can reduce the numbness by positioning and padding the ulnar nerve. Holding the arm at an angle around 122 degrees keeps the ulnar nerve at its deepest in its olecranon notch.

A product like this can give a doctor an option. A product like this, gives a doctor a non-operative and conservative treatment for a chronic and repetitive problem.

Keep an open mind

As an orthopaedic technologist, we all work in our own worlds. We use the products we trust, stick by the techniques which have served us well and when someone tries to show us a better way- we shrug it off. We all do it. Why take the risk? Why roll that short leg cast with a toe plate differently? Because it is a better option. Walking the aisles at last year's NAOT convention, I passed the "GORE-TEX" booth. Will Mayweather was doing a demonstration of a short leg walking cast with a toe plate, using Gore-Tex padding. I watched and said to myself, "this guy is good." Mayweather even made me look good. I came home from Miami and every toe plate was instructed to be a "Will" toe plate. The comfort, durability and finished look of the cast gave the patient excellent fixation and the ability to check the circulation of the toes. The finished end of the toe plate allows for protection and it adds excellent strength with less material.

Learn the Back of the House

Do your best to understand how the back of the house affects you, and how you affect it. Back of the house is an old restaurant term. It refers to the costs, billing and buying of products. In the medical field, we have excellent guidelines to follow which can help us understand billing and collection. L-Codes and CPT Codes give us descriptions of all products we use and

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even items that are custom-made in our own office. Try to spend time with your medical administration and ask to review the codes that have been matched up with each of your soft goods.

Also, check the purchase price of the product to the billed-out priced. In doing this review, I can almost guarantee you will find problems. Also discuss with your medical administrator you time/task ratio. Time/task ratio basically refers to how long it takes you to complete a specific task. The application of a wrist splint as compared to the application of a custom-made hand/wrist orthosis should be charged differently. The fixation of each is to immobilize the wrist. The wrist splint is used basically as a transitional tool or on a small buckle fracture. The time/task ratio is minimal. You open the box, place it on the patient and trim the straps. The hand/wrist orthosis can take much more time. Custom-molding the patient requires trimming, cutting, grinding, and placement of straps. Normally, a refit is required due to swelling or atrophy. The time/task ratio is very high and the finished product should be billed out accordingly.

Your teammates in the business office should understand the effort and expertise that is put into a product like the hand/wrist orthosis. By educating the medical administration on your time/task ratios you can help them determine a fair billing price. Guidelines such as Medicare allowable give fair parameters of each L-Code.

Also, understand how our mistakes in the cast room can make for billing and collection nightmares. For instance, the fracture code/cast code problem arises in every practice or hospital. When the physician uses a fracture code to bill a patient, you cannot bill for the cast application. The professional component is already used. So, when the patient is brought to the cast room, we need to check which code was used by the physician- not just to slap down a code and pass the sheet on. When the two codes are used together, payment is denied, or in larger practices, your own computer system kicks the charge back. So what does this do to the billing office? It adds to the days in accounts receivable. If that number is too high, it's a problem. Why is it a problem? Remember the faces of your billing/collection teammates after a business meeting. You can directly help those people and just as importantly, help your practice.

The Bid

You can easily relate your first soft good/medical supply bid to your first time playing golf. It took a lot of time, you made mistakes, but you finally finished. The goal, of course, was the same- you want low numbers. So, put on your black pants and your red Tiger Woods shirt and let's get some low numbers. To have a good fair bid, you need three things, a vendor list, a soft good/medical supply product list, and a direct and honest cover letter.

The vendor list should include everyone. Use the big vendors and the small. Look to buy direct and also work with the area distributor. Remember, this is your list. The product list and the cover letter is all that the vendors receive. As we all know, some companies will not let you buy direct, but by sending a letter and product list to the managers, the parent companies and national sales representatives will have knowledge of your bids.

Soft goods/medical supplies should be listed together. Send the whole list to everyone. Also, remember to bid out all the supplies you order. Kleenex and toilet paper should not be forgotten. In the northeast, you would not believe the amount you can save with a good bid and purchase of Kleenex.

Last but not least, the cover letter. A specific time period should be given for the end of the bidding process. This end time should be far enough out, to give ample time for each vendor to collect his pricing. Also, a promise should be stated that these prices are confidential and non-negotiable. Be honest and straightforward. Also, make sure the terms of delivery are included in each vendors bid. If buying something direct from the manufacturer requires a minimum order of over \$500.00 and direct freight delivery, it may be more beneficial to buy the product from a local distributor. Why? The freight's going to kill you.

So now your work is done while the vendors are preparing your bids, right? Wrong. Questions, questions, questions. Try to include in your cover letter the answers to all those questions on your product list. Try to include an average monthly use. Monthly use? Give the vendors the approximate volume, but do not promise it. Make sure they understand that it is an estimated monthly use.

Now, the due date comes and you tabulate your

numbers and you are done. Here is where the real work begins. Making sure which wrist splint is which, the quality of that wrist splint, and service of that wrist splint's specific company. This is a nice time to sit down with that administrative team. Show them the decision process. Get their feedback. I know, why include them? Well, when that long time vendor loses a big chunk of business, he will go over your head and that administrative team will have an excellent heads up to back you up.

Quality, functionality and price are all very important components in making any decision on the product. Service, on the other hand, affects all of the others. The prices can be great, but if the company does not get it to you in a timely manner, you can't keep it on

the shelf or get it on a patient. If the product is manufactured on the west coast will the customer service hours work with your schedule? Here is a chance to help you with an educated decision.

Maybe I've added a little more work for the average orthopaedic technologists. But, who wants to be average? By reading this article and being part of professional organizations, we show that we all want to grow and improve.

Evolve

I'm not asking you to trade in your scrubs and fiberglass-covered scissors for a business suit. I'm recommending a few ways to help improve your hospitals and practices and our profession.

Stages of Fracture Healing

SSG Michael A. Trova, OTC, EMT-B

When a bone is fractured the healing process begins immediately and consists of 5 stages. (1)

Haematoma formation

Immediately, after the bone has been fractured, blood coagulates (clots) and interstitial fluid enters the space outside the blood vessels and causes swelling (edema) beneath the epidermis. The blood clot acts as a bridge to facilitate movement of new cells to the fracture site and fracture healing begins.

Cell proliferation

Between 7-10 days(2) following the fracture, cell proliferation begins. Cell proliferation is the converting of the blood clot to fibrous materials (e.g. collagen fibers, mineral salts), with the clot shrinking in size. The fracture bone ends start to become sticky during this process.

Callus formation

At the 3rd week(2), callus formation (osteoblasts) start to produce the new bone around the fracture site. When viewed by radiographs, the fracture bone ends have a cloud like appearance. During this stage the bone is becoming stronger, with less pain felt by the patient.

Consolidation

Between 6-12 weeks(1,2), consolidation (callus de-

velopment) is started. Callus development (formed within the medullary cavity and the ends of the broken bone), will harden and be absorbed as the fracture repair is completed with the bone regaining full strength. (1,2)

Remodeling

From 12 months and beyond (1,2), remodeling (osteoclasts) has started. Osteoclasts (3) is a continuous, slow process of absorption and removal of bone. A complete union of the fracture is later identified through radiographs. In children (depending on the age), remodeling removes most signs of the fracture site. In adults, there may be residue signs (deformity, arthritis, and deficient range of motion) at the fracture site for several years.

ABOUT THE AUTHOR

Michael Alan Trova of Vermont has been an Orthopaedic Technologist for the past 12 years. He is presently teaching future Orthopaedic Technologists at Fort Sam Houston, Texas. Trova plans on publishing a splinting and casting book in the fall of 2002.

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