

AOTA THE AMERICAN OCCUPATIONAL THERAPY ASSOCIATION

OT PRACTICE

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*Lifestyle
Redesign*

*Improving
Health
Reducing
Costs*

PLUS

Active Participation in AOTA

OT in a Changing Marketplace

Nothing Ventured, Nothing Gained

John Farrell, with Henry Hoffman

As occupational therapists working regularly with stroke clients, my brother Henry and I came up with several ideas for new stroke rehabilitation exercise devices. Frustrated and discouraged with the health care reimbursement changes that had been ravaging the rehab landscape, we decided to reinvent ourselves. Why not? After all, as occupational therapists we have been trained to adapt and modify. We had the edge. We worked with stroke clients, were familiar with current equipment, knew what was lacking, and were aware of what our clients needed. So, with our ideas and a solid understanding of the industry, we set out to bring our product to market.

We started a company called Affordable Therapy Equipment, Inc. and chose to incorporate to limit the financial liability. The two of us worked simultaneously. Henry researched and handled the start up of the company, while I started the research and development (R&D) of the product. My responsibility was to turn our idea into a device ready to market. Henry's father-in-law is a lawyer, so we were able to get some initial guidance with starting a company. Using all our personal contacts to help save money and get as much free advice as possible was crucial in the beginning.

There were many factors we had to consider when bringing the product to market, including R&D, patents, manufacturing, shipping and receiving, marketing, and distribution.

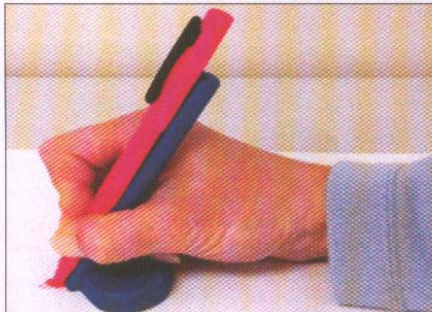


Figure 1. The Steady Hand magnetic device helps persons with hand tremors write more smoothly.

RESEARCH & DEVELOPMENT

R&D starts with making a working prototype. Sourcing out the materials needed to make the prototype involves a lot of phone work and the ability to make your company sound more important than it is. For example, "Hello, my name is John, and I'm the manager of the research and development department at Affordable Therapy Equipment. We are thinking of adding a new product to our rehab line and we would like samples and quotes with price breaks for 3/4" PVC..." Well, you get the idea.

Those of you who have one or more ideas but do not want to start a company can skip the above step and take your idea directly to a rehab product manufacturer. The company will send a nondisclosure agreement (this offers you some protection) that you will sign and return with a detailed description of your product. If the company is interested, it typically will handle the manufacturing, marketing, and distribution of your product. In turn, you will receive royalties and a small percentage of net sales. Some companies will even pay for your patent and the associated fees.

PATENTS

We decided to get patents for our products. The process starts with filing a patent-pending application called a *provisional*. A provisional patent is good for only 12 months and costs \$80. The U.S. Patent and Trademark Office does not actually examine your provisional application unless there are grounds for infringement. The good thing about having a pending patent is that it is affordable, you receive a filing date that verifies the date

your idea was submitted, and it provides some form of protection for your product. Competitors tend not to copy products when the word *patent* is near the name. During the 12 months you need to determine whether you want to file a *non-provisional*, otherwise known as an official patent application. If you believe that consumers and rehab product companies will desire the product, filing a non-provisional might be worth doing. Now I have good news and bad news. The good news is that the official patent, if done correctly, will give you adequate protection of your product. The bad news is that a patent can be very expensive, depending on the type of invention. If you have an idea for a product that is similar to many other products or is an improvement on an existing product, then be prepared to pay. Because our first product was fairly simple and there were no similar products on the market, we filed our own patent to save money.

MANUFACTURING

Manufacturing involves the assembly of your product. You can choose to do the

manufacturing yourself or you can have a company do it for you. The decision will depend on the amount of free time you have, available space, complexity of the product, and how much start-up money you have. Having a company manufacture the product for you saves a lot of work. We chose our other brother Jeff, who is in the plastics business. He and a friend had access to warehouse space and some free time. They handled the manufacturing, shipping, and receiving.

SHIPPING AND RECEIVING

Shipping and receiving involves packaging your product, which includes space to stock the shelves with inventory. We decided to open an account with a nationally known shipping company. They provided us with size and material guidelines, pricing, and access to their Web site to track orders for our customers. We also ship internationally, so package size and weight affect shipping cost.

MARKETING

Henry had the idea to use e-commerce to market our product. A Web site reduces overhead expense, and with the right links can reach thousands. Make sure your Web site has the capability to handle real-time credit card orders. There is a charge for this service, but it is well worth it. We initially supplemented e-commerce with a mailing to practitioners, which turned out to be less than fruitful. We then focused our marketing directly on stroke survivors, advertising in the two national stroke magazines. This approach started the ball rolling because we encountered a great response. In addition, the clients were bringing our product to their practitioners to use, which generated more exposure. Determining the best audience and media for marketing is a paramount decision that will save you money while generating revenue. Independent sales representatives, trade shows, and media coverage should also be explored. You want to reach as many people as possible for the least amount of money. It is no surprise that advertising continues to be our biggest single expense.

DISTRIBUTION

One major goal should be to place your products into the rehab catalogs, which allows for increased exposure and larger orders. Know the deadlines for getting

Business Progress Report

Affordable Therapy Equipment, Inc. has developed four products that cater to persons with neurological impairments. The Hemi-Glide is an exercise device and program for stroke survivors with upper-extremity impairments. The Pediatric Hemi-Glide is for children suffering from upper-extremity impairments. The Steady Hand is a magnetic writing device for persons with hand tremors (see Figure 1 on p. 21). Lastly, the Functional Tone Management System (FTM) is a dynamic forearm and hand orthosis that allows many stroke survivors the opportunity to use their involved arm and hand for grasp and release activities for the first time since the stroke.

The Hemi-Glide and the Steady Hand were available in rehab catalogs beginning late last year. A North Carolina clinic is currently using the FTM in a 1-week arm training program we developed in December 2001. Participants spend 6 hours a day learning and practicing task-oriented activities using the FTM and the Hemi-Glide. Our clinical trials have shown good results in motor control, strength, and tone. With the help of the FTM, participants who had strokes as long ago as 21 years are using their arms to perform activities of daily living for the first time. The University of North Carolina and East Carolina University have received grants to study our program. To find out more about our products and programs, visit our Web sites: www.stroke-cva.com and www.hemiglide.com. ■

products in for review for the next catalog. We missed some deadlines initially and were forced to wait another year. The downside to catalog orders is that the company will require a 40% to 50% discount off the retail price. However, the volume and exposure are definitely worth it.

CONCLUSION

The above factors will determine whether your product is successful. Unfortunately, you can have an excellent product that is extremely effective for a certain population but does not sell for various reasons (e.g., price, lack of exposure, etc.).

Often in a clinic setting or at an after work "happy hour," practitioners discuss great ideas that are disregarded or not taken seriously. Lack of knowledge regarding product development, operating a business, and initial start-up costs are just a few of the many intimidating roadblocks that deter people from bringing their ideas to market. Our next goal is to develop a program where practitioners can help each other bring new ideas to market. Currently, the large rehab catalog companies dominate the industry, making it difficult for the "little people" to break in. Occupational therapy practitioners can make a big impact in the rehabilitation product industry with creative intuition and adaptability. If we educate ourselves and become more business savvy, then we can provide yet

another avenue to promote occupational therapy and its versatility. ■

Resources

There is an excellent forum for occupational therapists and occupational therapy students with new product ideas at the AOTA Annual Conference. Maddak Inc., a rehabilitation products company, sponsors a competition with cash awards and free market analysis to the winner(s). We won first prize at the 2002 Maddak awards with one of our new stroke products. For more information on the 2003 Maddak awards, go to 63.125.198.12/awardinfo.asp.

John Farrell, OTR/L, graduated from the Medical University of South Carolina in Charleston in 1996. He has worked in multiple care settings, including acute, sub-acute, home health, and outpatient. He has worked with stroke survivors for the past 6 years and currently works for Tar Heel Home Health and Beaufort Physical Therapy in North Carolina.

Henry Hoffman, MS, OTR/L, graduated from D'Youville College in Buffalo in 1997. For 5 years, he worked as a clinical specialist in orthopedic medicine and manual therapy at the Burke Rehabilitation Hospital in White Plains, New York. He left Burke recently to devote more time to Affordable Therapy Equipment, Inc. His interests are in the orthopedic and neurological treatment of upper-quadrant impairments.