

# The 4 S's to Consider to Improve Your Shoe Fitting

*Size, shape, stability and style are the keys.*

By Josh White, DPM, CPed

**F**ive years ago, few podiatrists were interested in fitting shoes. Spurred on by the Medicare Therapeutic Shoe Benefit and an explosion in the incidence of diabetes, an ever-growing percentage of practitioners now make fitting shoes an important part of their practices. While most podiatrists fit shoes effectively, many still return far more than they should, too many before they find the right fit.

Poor shoe fitting puts patients at risk for ulceration, is time-consuming, and imposes costs on the practice. Patients expect podiatrists to demonstrate a level of shoe-fitting expertise beyond what they can get at a local shoe store. This is simply not possible if podiatrists order shoes based only on the size that patients wear or say they wear. When shoes ordered by podiatrists fit patients poorly, it undermines the integrity of the Medicare program and discourages patients from wanting a new pair each year.

Successful shoe-fitting is dependent on a conscientious approach and setting realistic expectations with each patient. It is up to the practice's shoe fitting person to determine the best size and recommend styles to best meet patients' therapeutic and aesthetic needs.

Every office can be good at fitting shoes. It's easy if the person responsible keeps in mind four important considerations:

- Size
- Shape
- Stability
- Style

The suggestions that follow are based on years of personal experience and feedback accumulated after working with hundreds of practices. This advice is guaranteed to result in fewer shoes not fitting, higher levels of patient and staff satisfaction, and ultimately fewer diabetic wounds.

## Size

The size a foot measures is not necessarily the shoe size that fits best. Determining the correct shoe length and width depends on a

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combination of objective measurements and subjective patient feel. The size a foot measures is generally close to the shoe size that fits best but is not definite. Foot size can vary based on the device used for measuring. Shoes of the same length and width can differ widely in fit. This may be based on the shoe's shape and the material that it's made from. Additionally, a person's subjective feel of what is comfortable is yet another variable in determining the best shoe size.

To best determine shoe length and width, consider the following:

- **Make one person responsible for shoe fitting.**

Shoe fitting is as much art as science. With experience, the shoe fitter will become adept at measuring, understanding patients' needs, and setting realistic expectations.

- **Use display stands to determine length and width.**

Most shoe companies offer podiatrists a display stand with a small number of shoes in the most common sizes. Such an approach decreases the guesswork in fitting, which is inherent when using a measuring stick or Brannock device. Many offices return less than one shoe for every 20 ordered. Offices that fit patients with a sizing run of shoes instead of just a measuring stick are about 25% more accurate. Sample shoes should be in the wide width and set up with a single spacer beneath the diabetic insert. If the test shoe fits slightly snugly, try again with the spacer removed. If this fits comfortably, order the shoe in the extra wide width. Likewise, if the sample shoe fits too loosely, try again with the second spacer added. If better, order the shoe in the medium width.

- **Fit patients objectively, and not based on a size.**

The right size shoe is often different from what patients have been wearing. Show patients how their own shoes fit. Explain that when they are standing, you want their shoes to allow 5/8" room between the end of the longest toe and the end of their shoe.

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Sometimes the correct shoe size is significantly larger than what patients are accustomed to wearing. Minimize patients' objections to the size you determine to be best by demonstrating how the right shoe fits before you inform them of the size.

- **Shoes with removable spacers fit best.**

Aetrex, OrthoFeet and Acor shoes all come with two pairs of spacers. These thin pieces of firm foam offer the ability to make slightly loose shoes more snug and slightly snug shoes looser. Fit new shoes with a single spacer beneath the diabetic

insert. This way, if shoes fit too snugly, the fit can be improved by removing the spacer. If the shoes fit too loosely, adding the second spacer beneath the insert will make the fit more snug.

- **When dispensing shoes, tie the laces for patients.** Though it sounds ridiculously obvious, patients will sometimes not pull their laces adequately snug, thereby making an otherwise correctly fitting shoe feel too loose. Patients who have been wearing shoes that fit too small must be made to understand that correctly fitting shoes will sometimes feel loose when they are first worn.

- **Avoid mismatching sizes.** If patients' foot sizes differ by no more than a full shoe size, they can usually be fit comfortably with shoes that have removable spacers. If there is a more significant difference, it's best to consider referring the patient to a store where shoes can be tried on. Consider custom shoes if there are extreme differences in foot size.

- **Try on shoes with the same-thickness sock with which the shoes will be worn.** Millimeters matter. When using

try-on shoes, fit patients with the same thickness socks they will wear with the ordered shoes. Ordering an athletic shoe based on a test fitting with a dress sock will result in the shoes fitting too snugly.

- **If using a measuring stick or Brannock Device, use one that is brand-specific.** Measuring devices differ. A size 9 on one stick will probably measure differently

on a different brand device. As three shoe sizes comprise an inch, a half size is only 1/6" in length. It does not take being off by very much to significantly affect length measurement. While measuring sticks and the Brannock device

are commonly used for determining shoe size, they are approximately only 75% to 80% accurate; using try-on shoes usually provides 85% to 95% success.

- **Minimize Mediums.**

Statistically, far fewer medium width shoes are ordered than wide and extra wide, approximately 20%, 50% and 30%, respectfully. No measuring stick can effectively determine shoe width. A stick only measures side to side while shoe width reflects foot circumference. Feet that measure the same side to side can vary greatly in thickness. A deeper foot actually requires a wider width shoe. The best way to determine width is to have shoes to try on. If this is not possible, an experienced shoe fitter will actually be able, simply based on appearance, to reasonably determine the shoe width to order. This is based on

considering an average foot to be a wide (D for women, EE for men), a shallow bony foot a medium (B for women, D for men); a thick, Fred Flintstone-looking foot is most likely extra wide (2E for women, 4E for men).

- **Don't order shoes with only 3/16" additional depth when using with custom inserts.** Medicare requires custom inserts to be at least 5/16" thick but requires depth shoes to have only a minimum of 3/16" additional depth. Putting a 5/16" thick insert into a shoe with 3/16" additional depth will invariably make the shoes fit more snugly. To ensure that shoes with custom inserts fit well, stick to models with at least 5/16" additional depth.

- **Stock pairs of shoes.** Most podiatrists are keen on keeping their offices from resembling shoe stores. Irrespective of this, keeping pairs of shoes in stock best enables fitting. Offices that fit a lot of shoes will benefit by stocking a small assortment of shoes in the most common sizes and styles. In addition to improving fitting, keeping shoes in stock will increase

your sales to cash-paying patients. Patients are more inclined to pay for shoes when they can leave with them the day that they are seen in the office. Some shoe companies offer a substantial discount to podiatrists who order a limited assortment of paired shoes in the most common sizes.

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### Shape

The shape of the shoe is determined by the last on which it is made. Feet come in different shapes and fit best in shoes that match those shapes. Some SAD-MERC-verified "diabetic" shoes are made on lasts that offer substantial

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room in the toe box. Other SAD-MERC-verified shoes are made for the general population and are most appropriate for patients with diabetes who have minimal foot deformities. Some feet are so irregularly shaped that no ready-made depth shoes will fit properly and custom shoes are the only viable option.

- **Refer out significant foot deformities and large partial foot amputations.** Approximately 10 percent of patients have foot shapes that are so irregular that they exceed what is possible to accommodate with depth shoes. Conditions that create such situations include Charcot deformity and transmetatarsal amputation. Such feet are most appropriately fit with custom molded shoes. These patients must either be cast for molded shoes by the treating podiatrist or referred to another podiatrist, pedorthist or orthotist/prosthetist.

- **Keep repeat orders as similar to the original as possible.** When a shoe fits, reorder a style made from the same last. Shoe fit can vary, even if the same size, from the same manufacturer, if the shoes are made on different lasts.

### Stability

The more flexible the foot, the more important it is that the shoe integrates stability features like firm heel counters, torsional control, and a supportive upper. Feet with higher arches can be appropriately fit with shoes that offer less support and more in the way of lightness and cushioning. Providing a shoe with superior support when it is not required adds unnecessary weight and cost.

- **Use the "Three Finger Squeeze" and the "Twist" tests to determine shoe stability.** Shoe stability is often independent of shoe price and product description. If stability is desired, it's important to know how to determine it yourself. Rigidity of the heel counter, the rear part of the shoe, is one indication. If the counter is

firm, you should barely be able to squeeze it with your thumb and forefingers. To check torsional stability, hold the front of the shoe in one hand and the heel in your other. Give it a twist. A stable shoe will hardly twist; a flexible one will twist a lot.

### Style

Shoes and inserts can reduce the likelihood of ulceration only if patients wear them. Shoes must be appropriate for patients' activities and lifestyles. Medicare-qualified styles are available in a host of styles including dress, athletic, hiking, casual, high top and with Velcro closures. Soft stretchable mate-

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rials are best for accommodating rigid bony prominences; washable shoes are appropriate for patients with incontinence. Recommend a style that will be worn most to best prevent wounds from occurring.

- **Be selective as to whom you choose to fit.** Sometimes patients' attitudes make it difficult to satisfactorily meet their expectations. Minimize the guesswork by referring patients with difficult-to-fit personalities to a local pedorthist or orthotist/prosthetist, where they can try on an assortment of shoes. This way, such patients can know how their shoes fit before the shoes are ordered.

- **Have shoe samples of your**

**most commonly used styles.** Nothing works as well as "What you see is what you get." Display sample shoes of the most commonly recommended styles. Have a few different style categories represented. Replace unpopular samples with new models.

- **Limit patient recommendations to two or three models most appropriate for their needs.** Direct patients towards shoe styles most appropriate for their therapeutic needs and lifestyles. Suggestions include styles that are lightest weight, most supportive, those with Velcro closures, ones that feature soft stretchy uppers or are athletic. DO NOT simply hand a catalog to patients and ask them to pick any style shoe that they desire.

Wearing correctly fitting shoes in and of itself is no guarantee that patients will avoid ulceration and amputation. The Medicare Therapeutic Shoe Benefit encourages a team approach to care and helps ensure that patients participate in a daily program of self-inspection and regular follow-ups with their foot care provider. The basis for the Medicare Therapeutic Shoe Benefit is that preventative care can reduce costly complications.

Patients will know that the shoe program is working if they avoid ulceration and amputation. Podiatrists should anticipate that their patients are looking forward to replacing worn shoes and inserts each year. Optimally, Medicare will see that the amount spent on shoes and inserts is far less than what would have been spent for wound care, hospitalization, and amputations. By following these shoe fitting guidelines, podiatric practices can ensure that Medicare's Therapeutic Shoe Benefit creates this win-win-win outcome. ■

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