Guide to the Sulcus Stick™

Capturing a great foot impression is the start of all foot orthotic therapy. The AOMS TOT iPad® Scanner System provides an excellent scan of the foot (accurate to within .4 mm), but we must position the foot in the proper position to start.

To assist in this process, <u>SulcusStick.com</u> has developed the Sulcus Stick™.



This support allows the practitioner to position the foot in the proper position and then, with the assistance of the patient, hold that position until a scan is taken. Without the stick, a second practitioner will be required to hold the foot in position while the scan is taken. The stick is most often used with supine casting, although it can be adapted to prone casting, too, by having the patient lie close to the edge of the table.

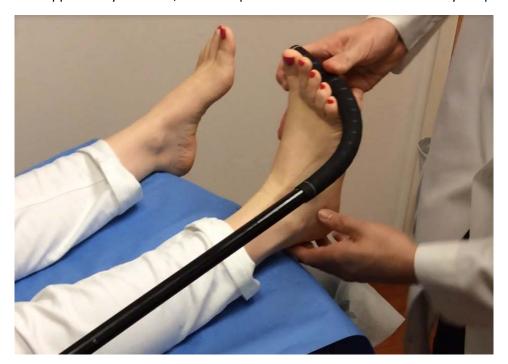


This is the final position for scanning.



Step 1: Position the foot

- Have the patient sit up on the chair or table and remove their shoes and socks. Ready the scanning app with the patient's first and last name, and select the proper foot. Then set the scanner down.
- Position the patient's foot at 90 degrees of ankle dorsiflexion and place the curved portion of the Sulcus Stick™ positioned in the SULCUS of the patient's foot. Do not block the metatarsal heads.
- The curve of the stick goes on the lateral portion of the foot, underneath the fourth and fifth toes to properly lock the midtarsal joint.
- Place the long, straight end of the stick ON THE CHAIR, next to the patient's hip. Have the patient lightly grab the pole and explain to the patient what you are doing and ask them to hold the foot in that position until the scan is complete (scanning takes approximately 10 seconds). This lets the weight of the stick be supported by the chair, while the position of the stick is maintained by the patient's hand.





<u>Step 2</u>: Check for STJ Neutral. You can palpate the head of the talus while rotating the foot back and forth until you feel congruity. One of the easiest ways to confirm STJ Neutral is to look at the curves of the lateral malleolus. If the curve above and below the malleolus are roughly symmetrical, the foot is in neutral—see the two yellow curves below.



Keep a steadying hand on the patient's foot until you are ready to scan. Ask the patient to maintain that position. They are not cranking their foot with the stick, they are using the position of the stick to merely maintain that neutral position for the scan.



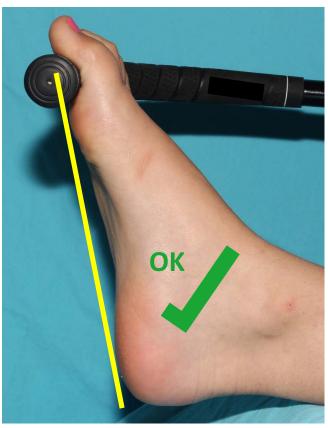


Step 3: Ensure the foot is at approximately 90 degrees of ankle dorsiflexion. A slight bit of plantar flexion is ok—but have the patient slightly bend their knee if they are struggling to get to 90. Tell them to gently curl their toes around the stick to keep their toes straight (see yellow line).

Perpendicular







Don't over-dorsiflex the ankle.



Don't over-dorsiflex the toes.

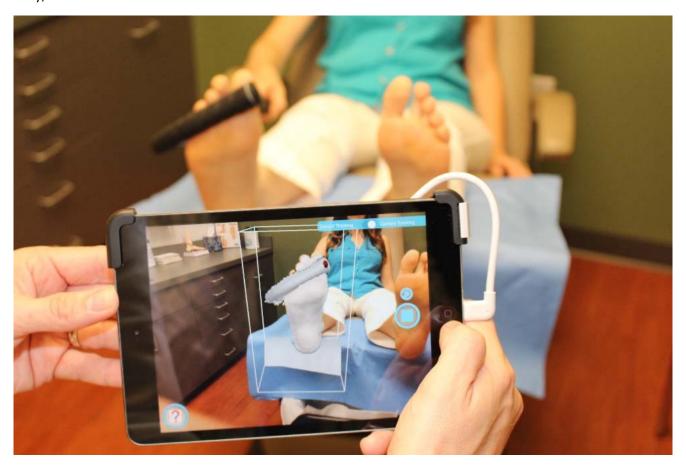




If you want to plantar flex the first ray, you can extend it past the end of the stick.



<u>Step 4</u>: Take your scan. Try to keep the toes pointing straight towards the ceiling with the foot perpendicular to the floor (without internal or external leg rotation). Make sure you get good heel definition. Nothing distal of the met heads is necessary, so the stick in the scan will not matter.



It takes a little practice to get comfortable with it—just remember, the goal for most patients is a neutral foot that is as close to $90^{\circ}-90^{\circ}-90^{\circ}$ as they can comfortably get.