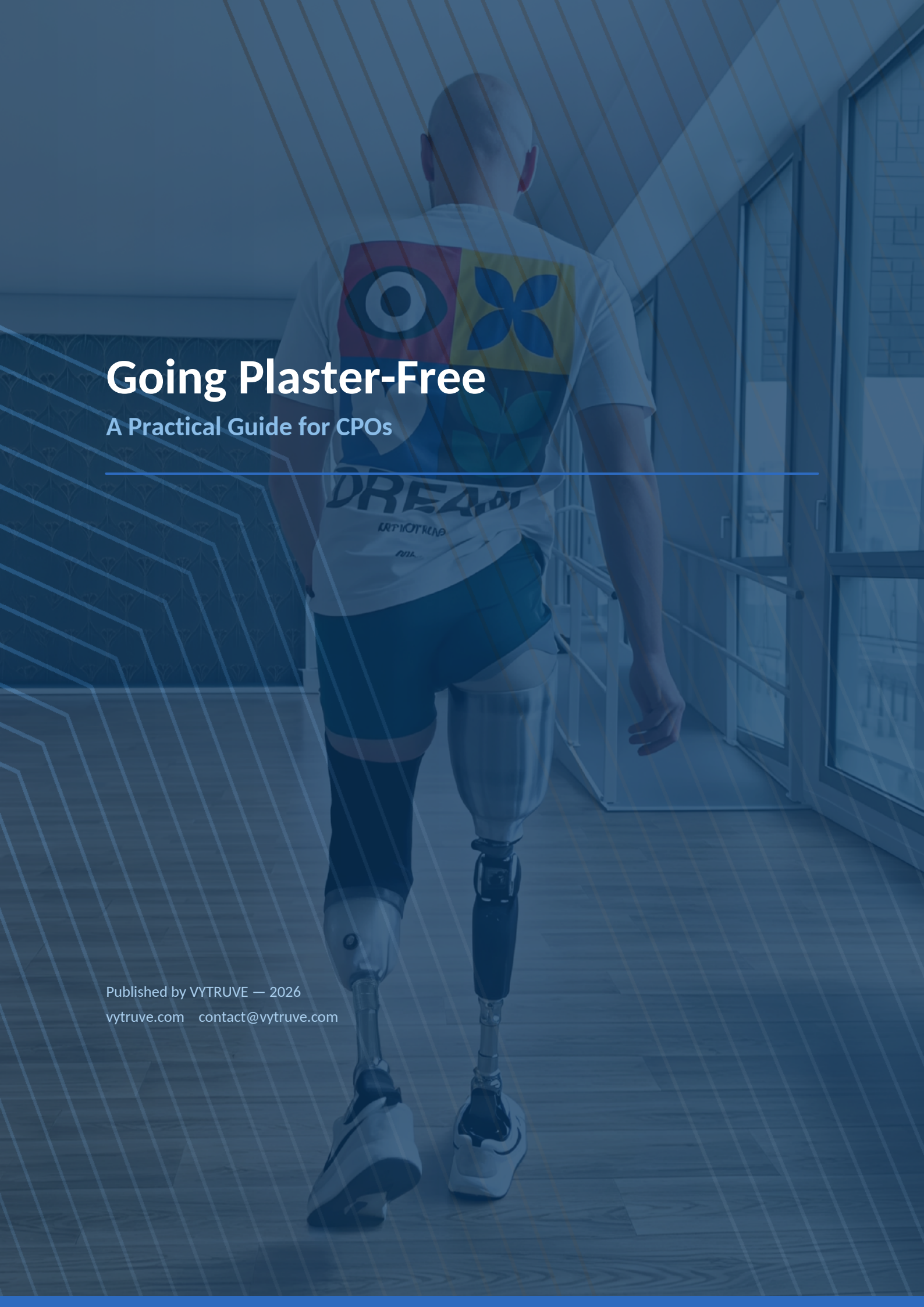


A person with a prosthetic leg is walking away from the camera in a modern hallway. The person is wearing a white t-shirt with a colorful graphic on the back that includes a target and a flower, and the word "DREAM". They are also wearing dark shorts and a prosthetic leg. The hallway has large windows on the right and a patterned wall on the left. The image has a blue overlay with white text.

Going Plaster-Free

A Practical Guide for CPOs

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About This Guide

This guide is for Certified Prosthetists and Orthotists who are considering integrating a digital workflow into their workshop, but want to understand exactly what that entails before making the leap.

This is not a sales brochure. It is honest, field-tested feedback based on the experience of over 110 professionals across 30 countries who have already made the transition with VYTRUVE. If you are still working exclusively with plaster, this document provides a candid, practical look at what moving to digital actually involves.

1. Why Is This a Topic Today?

Prosthetic socket fabrication has not fundamentally changed in decades. Plaster casting remains the standard in many workshops simply because it works. Experienced practitioners have mastered their protocols and achieve excellent results.

However, the reality of the profession is shifting. Workshop time is shrinking: between patient loads, documentation, and component management, the hours available at the bench are limited. Patient expectations are changing: patients are more informed and compare clinics, and a facility that can deliver a check socket in 48 hours with fewer adjustment appointments has a clear edge. Knowledge transfer is also at stake: the profession is physically demanding, and the younger generation is looking for less taxing, reproducible protocols where quality does not depend solely on the hand skills of a senior practitioner.

Plaster is not obsolete. But it is no longer the only viable option for combining profitability, workflow comfort, and clinical quality.

2. The Digital Workflow: What Does It Actually Mean?

Going digital does not mean handing your expertise over to an algorithm. Your clinical decisions remain strictly your own: you evaluate the patient, choose the suspension system, and define your modifications.

Practically speaking, the digital workflow replaces your physical tools. The 3D scan replaces the plaster bandage. CAD modification on screen replaces carving the positive with a surform file. The 3D printer replaces pouring liquid plaster.

No 3D modeling skills are required. The VYTRUVE platform speaks your language: you build up volume, relieve pressure areas, adjust trim lines, and set alignment.

Regarding turnaround: using the VYTRUVE Production Center, your check socket arrives within 48 to 72 hours. With an in-house printer, a scan taken in the late afternoon becomes a check socket ready for fitting the next morning.

3. The Equipment You Actually Need

The idea that you need to invest tens of thousands of dollars to get started is a myth. The transition can be step-by-step.

The baseline setup only requires a computer and a validated 3D scanner. The VYTRUVE platform already integrates the Shining 3D range (EinScan H2, Einstar) and the Medixa scanner. The golden rule: the quality of your baseline data depends on your scanning technique, not the price of the hardware.

For production, two options. The VYTRUVE Production Center is ideal for starting out with zero hardware risk: you scan, you modify, the socket is shipped to you. The in-house Vprint printer suits workshops with higher volume: it plugs into a standard outlet and offers a 30 by 60 cm build volume, covering the vast majority of lower limb applications.

4. The Transition in Practice: What to Expect

The main question is always: how long until I feel comfortable?

User feedback is clear: the vast majority of CPOs are fully autonomous by their 2nd or 3rd transtibial patient. The first patient naturally takes a bit longer as you translate your physical habits to a screen. By the third, the workflow becomes second nature.

There is no brutal cutoff. Plaster and digital coexist well during the first months. Most practitioners end up running the bulk of their daily activity on digital in less than a quarter.

5. Clinical Results and the Definitive Socket

With over 13,000 sockets produced through the platform, clinical data shows that digital matches or surpasses plaster in terms of consistency, provided the initial scan is well executed.

For transtibial cases, the standard protocol is scanning directly over a liner to contain soft tissue and capture a stabilized volume. The transparent PETG check socket allows immediate visual feedback on skin contact during fitting.

For transfemoral cases, the two-scan protocol using the VTF tool reliably captures ischial containment under true weight-bearing conditions.

For the definitive socket, the Vtransfer process allows you to scan the validated check socket. The system generates a PETG positive that replicates the inner and outer shape and preserves the exact alignment. This model is ready for carbon lamination in your workshop, with no need to pour or chisel out a plaster positive. The patient keeps their check socket throughout the entire definitive fabrication.

6. The Patient's Perspective

Patients notice the difference immediately. No wet plaster, no waiting for the cast to set, no physical strain during the impression.

The residual limb volume is documented at every visit. If the patient needs an identical socket a year later, the digital history allows you to produce it without starting from scratch.

A digitized workshop also reassures patients who are looking for fast, optimized care.

7. How to Actually Start

Start with scanning: a validated scanner and the VYTRUVE platform are all you need. Work through 2 or 3 straightforward transtibial patients to get comfortable with the CAD logic on screen. Use the VYTRUVE Production Center at first to avoid hardware investment while testing PETG during clinical fittings. Once comfortable, integrate the VTF tool for your transfemoral cases.

The VYTRUVE team is there at every step. You are never left alone with the software.

8. Getting Started with VYTRUVE

The VYTRUVE platform is accessible at app.vytruve.com. Patient file creation, scanning, and digital CAD modifications are included at no extra cost. You only pay for production using the Vcoin system, starting at 70 EUR per unit in Europe. A transtibial check socket from the Production Center starts at 150 EUR excluding shipping, delivered within 48 hours.

Starter bundles, including equipment rental or full scanner and printer setups, are available to match the pace and volume of your workshop.

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