### Hanger

# **Product Standards**



The Product Standards Playbook developed by Hanger is a guide to provide world class O&P solutions to our patients.

The Standards are endorsed by Hanger Fabrication leadership.

#### There are five primary goals:

- 1) standardize designs across Hanger
- 2) align expectations between clinicians and technicians
- 3) control input and output variation
- 4) support future system integration (MRP)
- 5) control design variation to reinforce clinical research outcomes reliability

### Why Product Standards?

Product standardization impacts both customer and business needs, including:

- Providing consistent, seamless, patient fitting experiences across the Hanger Clinic network.
- Delivering best in class, outcomes driven designs, the first time.
- Executing operational efficiency, timely turn-arounds and excellent service.
- Controlling design variation to reinforce clinical research outcomes.

### How do the standards work?

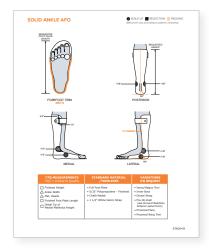
Standards focus on controlling variation. There are two critical elements in the playbook that work together:

**Output control.** Device specific standards or 'blueprints'. Each device has a blueprint identifying critical standard materials, trim lines, and build ups and reductions. The blueprints are Hanger best in class designs and will be used to control device fabrication across Hanger.

**Input control.** Digital order forms. Each device will have a specific order form designed to capture minimal critical to quality measurements required to build a device consistently, efficiently and to simplify communication and the ordering process. Learn more digital JotForms on pg 2.

It is mathematical: y=f(x).

The quality of an output (y) is a function of the quality of input (x).



Y (Technicians)



X (Clinicians)



### Which fabrication locations utilize the standards?

All of our locations have been trained on the product standards and are committed to working with you to assure a smooth transition.

#### What is 'CTQ'?

CTQ stands for critical to quality. CTQ represents the characteristics of the product or service necessary to meet the needs of customer. In O&P speak: they are the minimum inputs needed by our team to build the device the way you want it the first time, every time. Inputs are defined as: Patient measurements, corrected casts, and/ or precise patient scans.

#### Can I still order my preferred designs?

Most certainly. We are in the custom biz. We simply ask that you communicate in terms of what is different from the standard. This assures our teams are aligned from the outset and from any of our locations.

#### What is involved in the development process?

The primary model we use is DMAIC. DMAIC stands for define, measure, analyze, improve, and control. A number of tools and methods were used to collect information and analyze our current state of business, including clinician and technician benchmark surveys and metrics. After rigorous discussions and mutual alignment the designs are locked down (rev controlled) within our quality system. The designs are monitored for continuous improvement opportunities.

## Can I contribute to product standards development?

We encourage it, be part of the solution. The easiest way to share your insights is by completing the project feedback surveys emailed to you with projects you had fabricated by our network. Our teams review every response-every working day. If you want to be more actively involved in developing standards, reviewing or testing designs, do not hesitate to let us know at: <a href="https://doi.org/10.1001/jeach.no.nih.gov/">HFN\_Support@Hanger.com</a>

## How are you going to 'sustain the gain' long term?

We work within a quality system frame work, the Hanger Product Standards playbook is a controlled document. We will sustain the gain long term through monitoring, controlling, and iterating our products, processes and service levels to assure we are aligned with our Hanger Team's needs.

We review clinician project feedback daily, share insights and review areas for continuous improvement weekly and review key metrics with RVPs quarterly. We photo document each device we build and execute random audits on our device outputs to contain variation creep. Finally, we will provide regular communication updates to the field with any development updates.

#### What are Jotforms?

Jotform is a online form creation tool with conditional logic that tailors the form's contents based on your entries. Learn more about Jotforms through the following links:

Order Request Process FAQ

New Online Order Form Demo Video

Work Order PDF Review