SITES Medical
Orthopedic Clinical Experience Redefined

With the rapid shift of orthopedic procedures to the outpatient clinics, healthcare practitioners and administrators are in need of solutions that allow them to meet the increasing demands in the areas of cost, OR efficiency, and patient outcomes, during the episode of care. Hospitals are generally less interested in the potential promise of benefits delivered outside the episode of care if they have to pay more today. Hospitals are also less inclined to switch from a proven technology to an unproven one at the same price—they want solid reasons, backed with proof, to change vendors. "Given today's healthcare environment, we find the current level of interest in 3D printing to be surprising, especially when you consider the high cost and relatively unproven effectiveness of 3D printed devices. SITES Medical is responding to market needs with innovations that can reduce cost, improve outcomes, and enhance OR efficiency," states Greg Stalcup, President and CEO of the company.

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With its suite of technologies that meet the evolving needs of the outpatient clinical segment, SITES is a trusted partner to medical device companies that are seeking to enhance their orthopedic offerings, via new proprietary technologies and advanced manufacturing processes. SITES'

OsteoSync Ti is a proven, best-in-class titanium porous in-growth material that allows manufacturers to fabricate fully cementless joint replacements at a cost similar to plasma spray, an on-growth material. The use of fully cementless implants saves OR time as there is no need to prepare and apply bone cement. OsteoSync Ti cementless implants can be made at a price point that makes it economic for hospitals to substitute cementless devices for cemented ones, reducing several months-worth of inventory for SITES' OEM partners.

A typical implant manufacturing process often involves manual interventions—when the dimensions of an implant move out of specification—to bring the components back into tolerance. SITES' CoCr Stabilization technology reduces dimensional movement of parts during manufacturing, driving cost savings by avoiding costly manual re-workor reducing the scrap rate. The OsteoSync Ti and CoCr Stabilization technologies are enablers of an automated manufacturing process that will produce an implant set that is size-specific to the patient within three weeks of order receipt. While still under development, this Make-to-Order manufacturing method will allow OEM partners to significantly reduce implant component cost and inventory requirements.

Dave Anderson, Commercial Affairs Lead at SITES, highlights their engagement with the spine implant company Nanovis, which has incorporated OsteoSync into their interbody fusion devices and thereby achieved a leg-up on their competition in terms of initial and long-term implant stability. Nanovis has implanted approximately 5,000 implants to date

Greg Stalcup

and is experiencing market-leading growth rates.

The team at SITES is excited about implementing their make-to-order process that it believes is game-changing. A porous Polyether ether ketone (PEEK) technology called OsteoSync PEEK is under development, which will offer high bone in-growth along with the ability for surgeons to monitor bone remodeling via standard orthopedic imaging modalities without artifacts. In addition, they have developed many patents to deliver therapeutics through the implant to the bone-implant interface to address a variety of difficult-to-treat patient conditions such as infection and cancer.

SITES will continue to help businesses succeed by focusing on new technology development. "What sets SITES apart is its people; many of which are highly experienced in the orthopedic industry and know how to solve problems. Our team has an in-depth understanding of evolving customer needs and the creativity to come up with novel solutions," concludes Stalcup. Mт