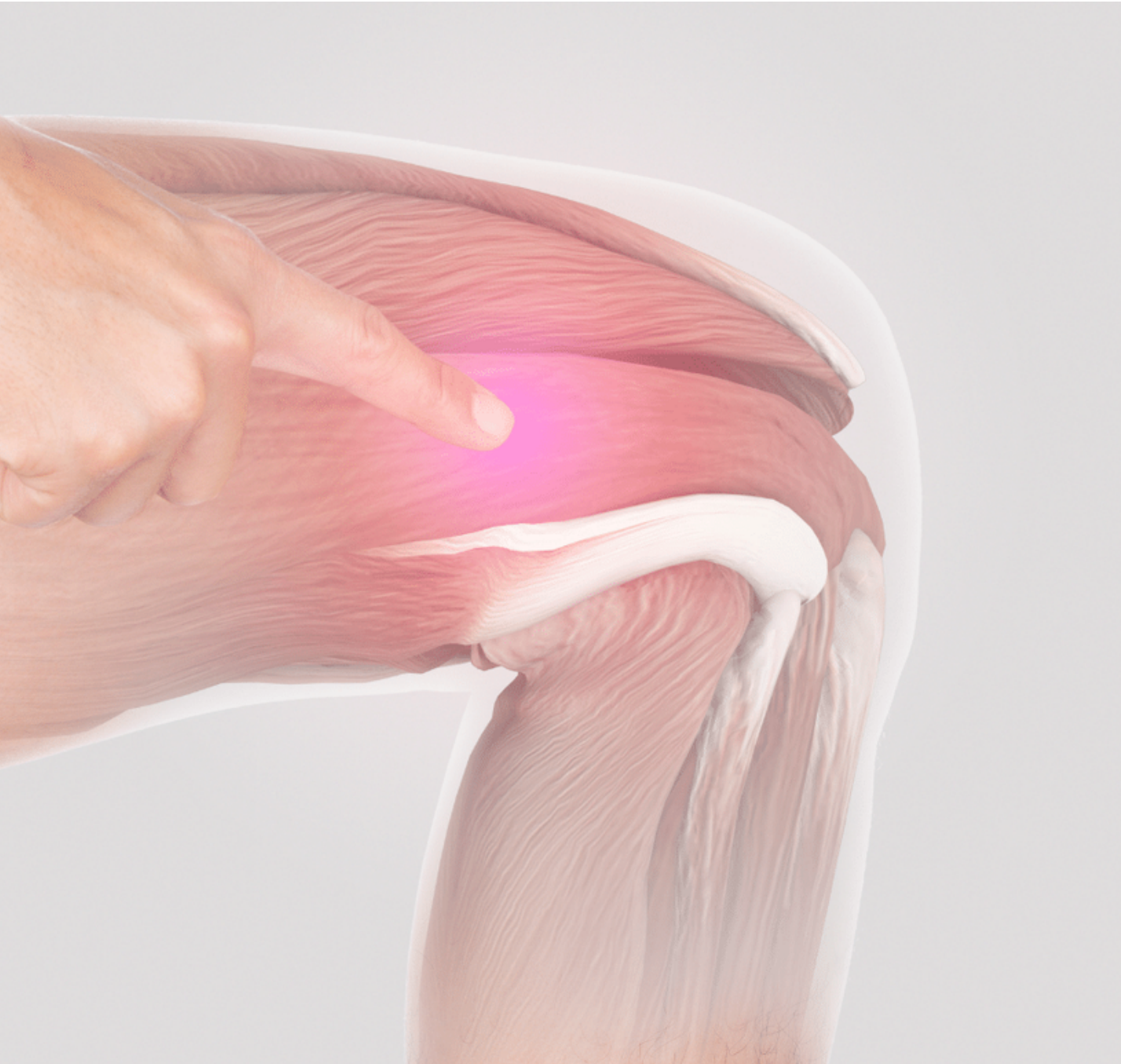




GoProto and Emergent Healthcare tackle knee replacement recovery



It was estimated that in 2020, 1.5 million Americans will need a total knee replacement.

It is also estimated that the post-operative rehabilitation for these patients will cost our healthcare system over \$4.8 Billion dollars and put a major strain on outpatient care. The good news is a solution is in the works and it has a name – Mobaflex.

It helps to solve this challenge through a combination of motion sensors and patented software to remotely guide and monitor the patient during the recovery period, reducing the need for costly physical therapy.

Emergent Healthcare Solutions is the source of this breakthrough technology and are gearing up to begin clinical testing in the Spring.

The Big Idea

On April 1, 2016, Medicare changed its reimbursement structure for knee joint replacement at hospitals nationwide. Rather than a fee for service, Medicare is now paying the hospitals a fixed amount for the surgery, regardless of the actual costs. This has created a huge problem for hospitals, as current costs exceed Medicare funding.

Patients going through this process today have limited and often cumbersome or complex rehabilitation options to choose from.

Paul Schlumpberger, CEO of Emergent, knew there had to be a better way. So, he got to work and consorted with his team that included an expert Orthopedic surgeon, a leading physical therapist, and a former top-ranking tech CTO.

The result of their dedicated research and development was manifested in a two-part system: one part software, and the other a physical sensor that would relay information to the software.

3 Ways Mobaflex Will Save Patients Money & Time in PT

Mobaflex, uses motion sensors and patented software to remotely guide and monitor the patient during the recovery period, thus improving outcomes and saving cost in three major ways:

- Patients can complete physical therapy at home without need for a costly in-home physical therapist
- Real-time tracking of the patients to catch infection or non-compliance within 12 hours therefore reducing the re-admittance rate
- Reducing the number of post-operative surgeon visits from 4 to 1, enabling the surgeon to spend their time operating

From Idea to Prototype...

Paul was looking for a solution to create a quick and reliable prototype to use for trials. Speed was of critical importance and Emergent, and he needed to take a working replica to the 800 hospitals that perform knee replacements for Medicare patients.

He also was thinking ahead and needed a path to production and to be as efficient as possible in the process.

Paul selected GoProto, Inc. (now UPTIVE) to help him determine the best method to develop functional prototypes, injection tooling, and injection molded parts to fit his team's specifications.

Why GoProto Was the Perfect Partner for Emergent

Like many innovators, Paul stated he has always been “hesitant to hand his product and IP over to unproven offshore manufacturers.” GoProto was able to put his fears to rest with assurances that come from decades of hands-on experience.

GoProto also offered Paul a team that could handle all stages of his product development, from prototypes all the way through parts production.

Another significant concern for Paul was communicating progress to his investors; they understandably wanted to see how their money was being spent. Once again, GoProto stepped up to provide intricate details of the project and its progress with ongoing reports, photos, direct communication with engineers and more.

These updates allowed Paul and his team to track progress and also make real-time changes. The high-resolution photos afforded sufficient clarity to make late-process texture and paint adjustments.

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