Medrobotics Case Study

CHALLENGE

Medrobotics, now a Boston-based company has deep Pittsburgh roots. A spin-off of Carnegie Mellon University, the company had its start with initial investment provided by local economic development organizations and angel investors. Umamaheshwar Duvvuri, M.D. CREATES’ Medical Director was deeply involved in the development of the FLEX Robotic System, providing clinical insight and design guidance during its early days. When the system was ready and needed a dedicated partner to assist with usability studies, CREATES was the natural choice. The decision was also driven by the fact that Medrobotics had already used UPMC facilities as a training center for the FLEX Robotic system and several members of the CREATEs team were intimately familiar with it.

OUTCOMES & IMPACT

Medrobotics had an internally developed protocol for product testing but clinical expertise, dedicated resources and access to a network of facilities were provided by CREATES. This enabled the company to undergo rigorous testing under surgeon supervision in fully equipped facilities, without having to create their own infrastructure. For a growth stage medical device company that needed to balance large capital expenses with the pressure to get to market quickly, this was invaluable. Several direct and indirect benefits were realized because of this engagement:

- Access to top thought leaders that aligned their surgical focus areas within the broader integrated health system
- Oversight from experienced clinical users of the core technology made for a flatter learning curve
- Deeper level of engagement for other clinicians
- FDA approved add-on to system
- Successful usability studies
- UPMC exposure through CREATEs led to early market traction opportunities
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My team and I have found the access to top surgical talent, both doctors and nurses, together with an industry-friendly attitude, invaluable for advanced product testing as well as for training of surgeons from around the world.

Samuel Straface, Ph.D, President & CEO, Medrobotics