



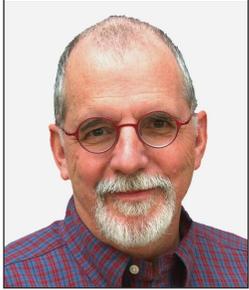
**OMNICA**  
CORPORATION

Product Development

*Engaging Views and OMNInews*

DESIGN AND ENGINEERING NEWSLETTER

## Here are the Six Reasons We Choose to Develop Medical Devices.



Sleek and shapely consumer products like cell phones, flat screen TVs, and some kitchen gadgets are celebrated and "sexy". Medical devices are not so exalted. Some are elegant in their own way, but outside of a hospital or doctor's office, most people don't recognize the products we design.

But that's all right with us. The nature of the projects and values of the industry mesh well with our philosophy.

**1 Overall quality** As members of the medical device community, we pursue quality over quantity, which conflicts with the reality that drives the consumer industry, whose mantra is usually "faster, better, cheaper". Our clients don't ask us to use inferior materials or shortcut the design process to save money. They recognize that end-users depend on medical devices to exceed expectations, and not by narrow margins, especially for Class II and Class III devices.

**2 High product standards** Most of the products we design are controlled by the FDA and must pass special labeling requirements, performance standards, and post market monitoring. Consumer device manufacturers cut costs by setting their standards just high enough not suffer too many returns or recalls. Legally they have minimum guideline standards, but other than UL (U.S.) and CE (in Europe), third party oversight is limited.

**3 Robust products** Medical products tend to stay on the market longer and are not necessarily replaced by new versions every 6 months to a year. It is another convincing reason that "just good enough" does not suit us or our customers. The extended life cycle prompts us to do a thorough job and produce devices that are built to last. Also, since we probably won't revisit redesigns of the same product for many years, our employees are constantly motivated by the challenges of other new devices. The side effect is an ever changing environment, which ensures that our people continue to maintain interest in their work.

**4 Interesting materials and methods** Activities that involve cutting-edge technologies and fabrication methods are intellectually stimulating. Since medical devices are usually manufactured in smaller volumes, we find ourselves working with materials and methods that are usually ignored by other industries. As an example, we recently designed a handheld device which uses a Kevlar and memory wire drive chain integrated with rare earth magnets. It's a slim chance a mainstream manufacturer would employ such exotic materials in a consumer product.



**5 We get to explore new technologies** Clients sometimes challenge our team to investigate projects that may involve an unproven concept or idea. In these cases they frequently give us the latitude to explore every possible solution. That's a good fit, too. Our R&D group is experienced in concept feasibility and testing, and they are particularly motivated when we're hired to incorporate a core technology or IP into a new product.

**6 Customer benefits** Speaking from experience, we can tell you that medical device development requires more than the right tools and vendor connections. Workers in this arena are typically well experienced individuals who can appreciate a unique set of expectations. Their work is guided by well-defined time and cost sensitivities, performance thresholds, and attention to detail. And the rewards are quite different from those in the consumer industry. What we design and engineer may not be alluring or recognizable, but work in this field gives us the opportunity to develop new and complex devices and instruments that can benefit patients' lives and the quality of care from their service providers.