#### **EXPONENT UX** USER EXPERIENCE

Research, Strategy & Consulting

# Medical Devices & Pharmaceutical Products

Exponent<sup>®</sup>



Manufacturers across a range of industries have long recognized the value of user experience (UX) research at every stage of the product lifecycle — especially in the high-stakes world of medical devices and pharmaceutical products.

A compelling user experience can accelerate regulatory approvals, create significant competitive advantage, and drive market success. Getting it right, however, can be a complex and challenging effort. A mistake can have far-reaching consequences. These products are highly regulated and monitored, and costly regulatory review cycles can add up quickly. Countless liability issues lie in wait. Safety is, of course, a primary concern; mitigating the risk of injury to patients and the risk of legal exposure to both manufacturers and healthcare providers is a fundamental requirement.





## A Scientific Approach to UX

Exponent UX offers sophisticated, rigorous research designed to address these issues head on. We rely on deep scientific expertise, trusted methodologies, and extensive capabilities to help give you a detailed understanding of how people perceive and interact with your products — not how you think they do or even how they say they do, but how they actually do.

Our highly credentialed scientists and researchers have unsurpassed UX expertise, with degrees in human factors, cognitive and perceptual psychology, ergonomics, computer vision, and other related areas. We draw from our team of similarly credentialed experts in medicine and medical devices with the category-specific skills to provide the right UX services for your needs at every stage of the total product lifecycle aligned to the demands of global regulatory agencies — from biomedical services to electrical engineering to regulatory support.

## Industry-Leading UX Facilities

Our industry-leading Centers for Scientific User Research (CSUR) are strategically co-located at Exponent offices across North America, featuring state-of-the-art facilities that include wet labs and cadaver capabilities that are ISO 17025, ISO 9001, and U.S. FDA CFR 21 part 58 accredited. These facilities arm us with an unparalleled array of advanced UX research technologies and methods, including bioelectric and psychophysiological sensing and biosignal processing. They enable us to perform highly detailed and sophisticated research and analysis that can quickly get to the heart of any UX challenge or concern by delivering objective, defensible, and data-driven results.



#### **Exponent UX Services**

#### Our UX services include:

- User needs analysis
- Time and motion studies and workflow analyses
- Use-related characterization analysis of users and use environments
- Use-related risk analysis support
- Evaluation of design, labeling, training, and packaging
- Formative human factors testing design and conduct
- Human factors validation study design and conduct
- HFE/UE report support



#### How We Can Help

With our unparalleled team of professionals, our broad and deep sector expertise, and our rigorous empirical research methodologies, we can help you protect your investments in your products and your brand. We can help you study the interactions between your products, your users, and your users' environments — including healthcare professionals, lay caregivers, and patients themselves. We can help you analyze how designs, interfaces, or entire user experiences can be improved based on an understanding of interactions between those elements and how to leverage that information to increase safety, reduce failures, eliminate unnecessary research, accelerate the regulatory review process, improve user satisfaction, and more.

Bottom line: We can help you make sound design and development decisions, reduce time to market, increase the lifetime value of products, and reduce exposure to litigation and loss.

Whether you're designing a new medical device, having regulatory compliance or usage issues, or experiencing challenges with your facilities or concerns related to healthcare professionals, caregivers, or patients, Exponent UX can help.

#### **About Exponent**

Exponent has been solving complex business and technical problems and providing design and process safety consulting services to the medical device industry for over 50 years. Our global, multidisciplinary team of 950+ engineers, scientists, physicians, and regulatory consultants routinely performs in-depth scientific research and analysis and rapid-response evaluations to provide clients with the critical information required for both day-to-day and strategic decision-making.

Our professionals are active in the research, publication, and presentation of scientific studies relevant to medical devices. They serve on various expert panels convened by professional societies, industry coalitions, and regulatory agencies and are involved in the development of industry standards.

### How can we help you?



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