

## Introduction to Human Factors

Eric Bergman, Ph.D.

### Abstract

This paper provides an introduction to “human factors engineering,” an applied science that seeks to optimize usability and safety of systems. Human factors engineering pursues this goal by aligning system design with the perceptual, cognitive, and physical capabilities of users. Human factors issues loom large in the diabetes management domain because patients *and* health care professionals interact with a complex variety of systems, including medical device hardware and software, which are themselves embedded within larger systems of institutions, people, and processes. Usability considerations must be addressed in these systems and devices to ensure safe and effective diabetes management.

*J Diabetes Sci Technol* 2012;6(2):229-230

---

**Author Affiliation:** LifeScan Inc., Milpitas, California

---

**Abbreviations:** (FDA) Food and Drug Administration

---

**Keywords:** blood glucose meters, design, diabetes, Food and Drug Administration, insulin pumps, human factors, usability

---

**Corresponding Author:** Eric Bergman, Ph.D., LifeScan Inc., 1000 Gibraltar Dr., Milpitas, CA 95035; email address [ebergma1@its.jnj.com](mailto:ebergma1@its.jnj.com)

---