

Introduction

As clinical trials have continued to become more complex, sponsors have turned to technology to increase efficiency. But with increased reliance on electronic systems comes more opportunity for risk if the technology is not managed appropriately. The 2016 update to the International Council on Harmonisation's good clinical practices guideline, ICH E6, is intended to address the shift from paper to electronic records, while building in more flexibility for clinical trials. The revised guideline focuses on electronic data, its maintenance and integrity, as well as on quality risk management targeting human subject protection and data integrity.

The most revised segment of the guideline, Section 5 – Sponsors, emphasizes the importance of risk-based thinking in all stages of a clinical trial. Under ICH E6(R2), the quality management system should take a risk-based approach to the following processes:

- Centralized monitoring;
- Clinical monitoring; and
- Software validation.

This report examines the key changes in Section 5, explains why they were made and reviews steps sponsors and other organizations must take to adjust to the requirements.

About the Authors

Dr. Susan M. Leister serves as the Director of Quality Assurance at Technical Resources International, Inc. and faculty for the University of Phoenix in both graduate and undergraduate studies. She has more than 20 years of experience in the pharmaceutical, biotech and medical device industries, with broad experience in GCP, GLP, and cGMP. She has a Bachelor's Degree in Biochemistry and Molecular Biology as well as an MBA and a Doctorate in Organizational Management with a focus in Leadership. Dr. Leister also holds certifications from ASQ as a Certified Quality Auditor and a Six Sigma Black Belt. She has led numerous regulatory agency inspections and built several quality management systems from the ground up. She has obtained CE marking for medical devices and helped organizations become ISO certified. She currently serves her local ASQ Section 509 as the Past Section Chair. Dr. Leister is a recent Award of Merit recipient from the National Institute of Health National Cancer Institute.

Contributing author James O'Reilly is a professor of law at the University of Cincinnati College of Medicine, the last surviving member of the negotiating team that produced the 1976 Medical Device Amendments and chairman of the FDA Committee of the American Bar Association. He has published 53 textbooks and a variety of articles and reports in the life sciences arena.