In this Issue

The Big Picture

6 A Roundtable Discussion
Working Toward Safer, Easier-to-Use Infusion Systems

Perspectives on Infusion System Safety

13 IV Smart Pumps: The Impact of a Simplified User Interface on Clinical Use
Karen K. Giuliano

23 Eliminating Clinical Workarounds through Improved Smart Pump Drug Library Use
Rachel R. Vitoux, Jennifer Lehr, and Helen Chang

31 Reducing Intermittent Infusion Syringe Pump Errors via Weight-Based Safety Parameters
Alison Bloomquist and Laura Seiberlich

Case Study

39 Ensuring Optimal Smart Pump Use through Augmented User Interface
Tim Hoh, Idal Beer, and Pamela Krueger

44 Implementing Smart Infusion Pumps at Kaiser Permanente
Lori Tonya Harrison and Jeff Peacock

About this Issue

This issue of Horizons provides insights from experts on improving the design and functionality of infusion pumps and systems. Perspectives on how simplified user interfaces for pumps can improve programming times and reduce use errors are provided. Other research describes how improved smart pump drug library use can help eliminate clinical workarounds. The issue also features case studies, including the challenges and rewards of one group’s smart pump implementation efforts, in which it leveraged quality data to improve pump safety and usefulness.

AAMI President
Mary Logan, JD, CAE

Vice President of Communications
Sean Loughlin

Managing Editor
Jena Passut

Senior Editor
Joseph Sheffer

Graphic Designers
Kristin Blair
Ruth Moyer

Copy Editor
Barbara Saxton

Editorial Board
Pat Baird
Baxter Healthcare Corporation
Bona Benjamin
American Society of Health-System Pharmacists
Anthony Easty
Massey College, University of Toronto
Christine A. Frysz
Greatbatch Medical
Michael Rakauskas
Baxter Healthcare Corporation
Ahmad Sajadi
Sajadi Consulting Services, Inc
W. Glenn Scales
North Carolina Biomedical Association
Philip J. Schneider
College of Pharmacy, University of Arizona
Nathaniel Sims
Massachusetts General Hospital and Harvard Medical School
Scott Thiel
Navigant
Ramakrishna Venugopalan
Animas Corporation, Johnson & Johnson

Horizons is a supplement to Biomedical Instrumentation & Technology (ISSN 0899-8205) and is published twice a year by the Association for the Advancement of Medical Instrumentation (AAMI), 4301 N. Fairfax Drive, Suite 301, Arlington, VA 22203-1633; 703-525-4890. © 2015, Association for the Advancement of Medical Instrumentation. Publishing services provided by Allen Press Publishing Services, a division of Allen Press Inc.

Membership: AAMI members receive a complimentary subscription. Contact membership at AAMI at 800-332-2264, ext. 1214.

Additional Copies: Visit www.aami.org/store or call 1-877-249-8226.


Advertising and Business: Send correspondence to Jane Richardson, Ad Marketing Group, Inc., 2200 Wilson Blvd., Suite 102-333, Arlington, VA 22201. 703-243-9046, ext. 102, e-mail: jrichardson@admarketinggroup.com, website: www.admarketinggroup.com.

Mention of any commercial product, process, or service by trade name, trademark, manufacturer, or otherwise in Horizons does not constitute or imply an endorsement or recommendation by AAMI. The views and opinions of the authors in Horizons do not state or reflect the opinion of AAMI.

POSTMASTER: Send address changes to BI&T, 810 E. 10th Street, P.O. Box 1897, Lawrence, KS 66044-8897. AAMI members send changes to AAMI, 4301 N. Fairfax Drive, Suite 301, Arlington, VA 22203-1633; 703-525-4890. Nonmembers send changes to Kansas address above.