

ORIGINAL ARTICLES

Adverse Events

- 627** Anticoagulation Across Care Transitions: Identifying Minimum Data to Maximize Drug Safety
N. Shehab; J.L. Greenwald; D.S. Budnitz

Anticoagulants are the leading cause of acute, serious ADEs among hospitalized patients, long term care residents, and older outpatients. The final anticoagulation communication at discharge (the ACDC List) is a well-thought-out and needed approach to addressing the care transition gap for patients treated with anticoagulants. Its implementation will have challenges, but they are likely to be greatly outweighed by the potentially devastating clinical consequences of poorly coordinated anticoagulation management.

- 630** Defining Minimum Necessary Anticoagulation-Related Communication at Discharge: Consensus of the Care Transitions Task Force of the New York State Anticoagulation Coalition
D. Triller; A. Myrka; J. Gassler; K. Rudd; P. Meek; P. Kouides; A.E. Burnett; A.C. Spyropoulos; J. Ansell

Anticoagulated patients are particularly vulnerable to ADEs when they experience changes in medical acuity, pharmacotherapy, or care setting, and resources guiding care transitions are lacking. A multidisciplinary task force convened by the New York State Anticoagulation Coalition developed a consensus list of 15 requisite data elements that should be communicated to downstream providers for all anticoagulated patients undergoing care transitions. Additional study is needed to objectively evaluate the ability of existing care systems to communicate the elements and to assess possible relationships between communication of the elements and clinical outcomes.

- 641** Suicide and Hospitals: New Data Suggest an Updated Approach
M. Hogan

The rate of death by suicide continues to rise in the United States, and the use of effective new interventions is not yet widespread. The first rigorous study to estimate national figures for the number and cause of inpatient suicides yields important findings: the rate of suicides within hospitals is low compared to previous estimates, and the great majority (about 70%) of inpatient suicides are by hanging. One important implication of these data is that there are almost certainly far more suicides in the days after discharge than during inpatient care. The burden of disease, trends, and emerging evidence of effective strategies call for increased focus on suicide prevention.

- 643** Incidence and Method of Suicide in Hospitals in the United States

S.C. Williams; S.P. Schmaltz; G.M. Castro; D.W. Baker

Understanding the rate of suicides in general and psychiatric hospitals and the methods used is important to guide prevention efforts. A cross-sectional analysis of data from 27 states reporting to the National Violent Death Reporting System for 2014–2015, and from hospitals reporting to The Joint Commission's Sentinel Event Database from 2010 to 2017 used categorical variables and qualitative reviews of event narratives to identify and code suicide events occurring during hospital inpatient treatment. The estimated number of hospital inpatient suicides per year ranges from 48.5 to 64.9, which is far below the widely cited figure of 1,500 per year. Analysis of inpatient suicide methods suggests that hospital prevention efforts should be primarily focused on mitigating risks associated with hanging, and additional suicide prevention efforts may be best directed toward reducing the risk of suicide immediately following discharge.

- 651** Characteristics of Reported Adverse Events During Moderate Procedural Sedation: An Update
M.R. Jones; S. Karamnov; R.D. Urman

Many interventional procedures are performed under moderate procedural sedation (MPS), but little data exist examining reportable adverse events (AEs) during MPS across specialties. In a retrospective review in which 83 MPS cases were analyzed, type of AE and severity of harm were examined to uncover associations between events with provider, procedure, and patient characteristics. The most common AEs were oversedation/apnea (60.2%), hypoxemia (42.2%), and aspiration (24.1%). The most common unplanned interventions were the use of reversal agents (55.4%) and prolonged bag-mask ventilation (25.3%). Significant differences in rates of AEs were demonstrated according to age, sex, and other patient characteristics. Interventional procedures involving MPS outside the operating room require thorough patient evaluation, optimization, and risk assessment prior to start. Communication among sedation providers and consulting and primary team members is paramount.

Hospital Readmissions

- 663** Evaluating the Implementation of Project Re-Engineered Discharge (RED) in Five Veterans Health Administration (VHA) Hospitals

J.L. Sullivan; M.H. Shin; R.L. Engle; E. Yaksic; C. VanDeusen Lukas; M.K. Paasche-Orlow; L.M. Starr; J.D. Restuccia; S.K. Holmes; A.K. Rosen

A qualitative evaluation of five Veterans Health Administration hospitals' implementation of Project Re-Engineered Discharge (RED) was conducted through semistructured telephone interviews with personnel involved in implementation. Qualitative data from these interviews were used to compare implementation activities across the five sites. Guided by the Practical, Robust Implementation and Sustainability Model (PRISM), cross-site analyses of the contextual factors were conducted using a consensus process. Progress and adherence to the implementation steps and intervention components varied across study sites. Although the sites were able to tailor and implement RED because of its adaptability, redesigning discharge processes and incorporating them into an organization's existing practices requires additional support/resources. Lessons learned from the study should be useful to Veterans Health Administration and private-sector hospitals interested in implementing RED and undertaking a care transition intervention.

Teamwork and Communications

- 674** Understanding Test Results Follow-Up in the Ambulatory Setting: Analysis of Multiple Perspectives

A. Ai; S. Desai; A. Shellman; A. Wright

Delayed or incomplete test result follow-up, which can lead to missed and/or delayed diagnosis, is an important issue in the ambulatory setting. Five sources of data were used to compass multiple perspectives on safety culture—two national surveys, patient and family complaints, safety reports, and provider response times to test message results in the electronic health record. The following metrics were inspected: how patients and providers estimated the frequency for providing timely test results; how patients' satisfaction with their provider correlated with their provider's response time to test result messages; and qualitative themes in patient complaints and safety reports filed by clinic. The institution was compared to national benchmarks using surveys. As test result response time decreased, patient satisfaction increased ($p = 0.0073$). Use of these five sources of data led to an examination of multiple perspectives in follow-up culture and identification of possible explanations for inappropriate follow-up.

Human Factors Engineering

- 683** Reducing Treatment Errors Through Point-of-Care Glucometer Configuration

J.L. Estock; I.T. Pham; H.K. Curinga; B.J. Sprague; M.Y. Boudreaux-Kelly; J. Acevedo; K. Jacobs

Multiple adverse events reported to the Food and Drug Administration (FDA) revealed that treatment decisions may be affected by how information is displayed on a point-of-care (POC) glucometer's results screen. A randomized, crossover simulation study was conducted to compare two results screen configurations: a numeric blood glucose value ("32 mg/dL") and a range abbreviation ("RR LO"). When the glucometer displayed a range abbreviation, 10.6% of participants made a treatment error. None of the participants made a treatment error when the glucometer displayed a numeric reading. Displaying a numeric reading eliminated potentially life-threatening treatment errors caused by confusing range abbreviations. Manufacturers should consider these findings during future research and development of POC glucometers.

695 INFORMATION FOR AUTHORS