

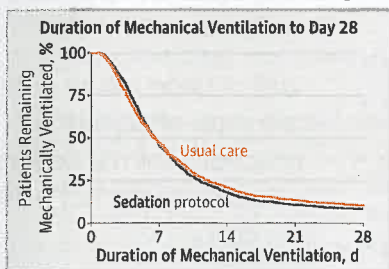
Research

Chlorhexidine Bathing and Health Care–Associated Infections 369

Daily bathing of critically ill patients with chlorhexidine is commonly undertaken with the intent of reducing health care–associated infections. In a cluster randomized, crossover study involving 9340 patients admitted to intensive care units at a single medical center, Noto and colleagues found that daily bathing with chlorhexidine did not reduce the incidence of a composite outcome of central line–associated bloodstream infections, catheter-associated urinary tract infections, ventilator-associated pneumonia, and *Clostridium difficile* infections. In an Editorial, Pittet and Angus discuss bacterial resistance and other risks of universal decontamination strategies.

◀ Editorial 365

Sedation Protocol for Critically Ill Pediatric Patients 379



Sedation protocols improve outcomes among critically ill adults undergoing mechanical ventilation. In a multicenter cluster randomized study that enrolled 2449 children undergoing mechanical ventilation for acute respiratory failure, Curley and colleagues found that compared with usual care, use of a nurse-implemented sedation protocol did not reduce the duration of mechanical ventilation. In an

Editorial, Mehta discusses sedation management in critically ill children.

◀ Editorial 363

MR-Targeted Biopsy and Prostate Cancer Diagnosis 390

Advances in imaging have led to development of targeted prostate biopsy techniques that combine magnetic resonance imaging and transrectal ultrasound images (MR/ultrasound fusion; targeted biopsy). In a prospective cohort of 1003 men with suspected prostate cancer, Siddiqui and colleagues compared targeted biopsy with standard extended-sector ultrasound guided biopsy for the detection of intermediate- to high-risk prostate cancer. The authors report that MR/ultrasound fusion biopsy was associated with increased detection of high-risk prostate cancer and decreased detection of low-risk prostate cancer. In an Editorial, Schwartz and Basch discuss implications of the study findings for prostate cancer staging and treatment.

◀ Editorial 367 Related Article 409

+ Author Video Interview jama.com



Humanities

The Art of JAMA
336 *Man in Armour Holding a Pike*, 1630.
Jan van Bijlert (1597/98-1671).

Poetry and Medicine
425 Lou Gehrig's Disease

JAMA Revisited
426 The Architecture of Viruses

Opinion

Viewpoint

353 Digital Medical Tools and Sensors
EJ Topol, SR Steinhilber, and A Torkamani

355 Sharing and Reporting the Results of Clinical Trials
KL Hudson and FS Collins

357 Focusing to Achieve a World Without AIDS
AS Fauci and HD Marston

359 Maximizing Antiretroviral Therapy in Developing Countries: The Dual Challenge of Efficiency and Quality
CJL Murray

A Piece of My Mind

361 What I Learned About Adverse Events From Captain Sully: It's Not What You Think
MP Stiegler

Editorial

363 Protocolized Sedation in Critically Ill Children
S Mehta

365 Daily Chlorhexidine Bathing for Critically Ill Patients: A Note of Caution
D Pittet and DC Angus

367 MR/ultrasound Fusion-Guided Biopsy in Prostate Cancer: What Is the Evidentiary Standard?
LH Schwartz and E Basch

LETTERS

Research Letter

417 Moral Concerns and the Willingness to Donate to a Research Biobank
T Tomlinson and Coauthors

Comment & Response

419 Heterogeneity in Meta-analysis of FDG-PET Studies to Diagnose Lung Cancer

420 Diagnosing Endocarditis in Patients With *Staphylococcus aureus* Bacteremia

421 Ethical Testing of Experimental Ebola Treatments

422 Correction

Editor in Chief
Howard Bauchner, MD

131 YEARS
OF CONTINUOUS
PUBLICATION

Clinical Review & Education

Diagnosis and Treatment of *Clostridium difficile* Infection 398



The incidence and severity of *Clostridium difficile* infection have increased in recent years. Bagdasarian and colleagues report results of a systematic review of current evidence regarding the diagnosis and treatment of *C difficile* infection in adults. Based on a review and synthesis of the data from 116 articles, the authors discuss laboratory testing, performance characteristics of multistep testing algorithms, and treatment

strategies—which should be based on disease severity, history of prior *C difficile* infection, and patient risk of recurrent infection.

➤ Continuing Medical Education jamanetworkcme.com

Decision Curve Analysis: Determining Diagnostic Test Benefit 409

Decision curve analysis is a method for evaluating the benefits of a diagnostic test across a range of patient preferences for accepting the risk of undertreatment or overtreatment. In this JAMA Guide to Statistics and Methods article, Fitzgerald and colleagues discuss use of decision curve analysis, interpretation of the results, and limitations of the method.

◀ Related Article 390

Nonleg Venous Thrombosis in Critically Ill Adults 411

An article in *JAMA Internal Medicine* reported that nonleg venous thrombosis may be found in approximately 2% of critically ill patients. In this From the JAMA Network article, Castellucci and colleagues discuss the epidemiology of venous thrombosis at sites other than the lower extremity. The authors note that further study is needed to assess clinical consequences of nonleg venous thrombosis and optimal treatment strategies.

From The Medical Letter: Antiviral Drugs for Influenza 413

Antiviral drugs can be used for treatment of influenza and as an adjunct to influenza vaccination for prophylaxis. This *Medical Letter on Drugs and Therapeutics* article summarizes recommendations for antiviral treatment and chemoprophylaxis during the 2014-2015 influenza season.

➤ Online @ jama.com



Editor's Audio Summary

Howard Bauchner, MD, summarizes and comments on this week's issue.

Author Reading



AUDIO Eric J. Topol, MD, reads his Viewpoint "Digital Medical Tools and Sensors."

Author Interview

VIDEO Interview with Mohummad M. Siddiqui, MD, author of "Comparison of MR/ Ultrasound Fusion-Guided Biopsy with Ultrasound-Guided Biopsy for the Diagnosis of Prostate Cancer"



JAMA Patient Page

432 Babies With Low Birth Weight

NEWS & ANALYSIS

Medical News & Perspectives

343 Mary L. (Nora) Disis, MD: Ready to Become Editor in Chief of the New *JAMA Oncology*

345 Hospital Consolidation Isn't the Key to Lowering Costs and Raising Quality

346 Health Agencies Update

New Modeling Software Evaluates Coronary Artery Blood Flow

Proposal Seeks to Enhance Availability of Clinical Trial Results

New Kidney Allocation System

347 Clinical Trials Update

Short Therapy Reduces Depression in Family Caregivers of Patients With Dementia

Hyperkalemia Controlled With 2 Novel Medications

348 News From the CDC

Upswing in Skin Cancer Costs

Avoiding Diabetes Self-management

Departments

333 Staff Listing

415 CME Questions

427 JAMA Network Abstracts

429 Classified Advertising

430 Journal Advertiser Index

431 Contact Information

Instructions for Authors

jama.com/public/instructionsforauthors.aspx