DEPARTMENTS

Letters to the Editor

1471 Joining a National Radiology Entity: A Radiologist Perspective
Timothy A. Bernauer, MD, Syam Reddy, MD, Reena Vashi, MD

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FOCUS ON PRACTICAL AI: IMPLEMENTATION

Guest Editors: Tarik K. Alkasab, MD, PhD, and Bernardo C. Bizzo, MD, PhD

Introduction

1474 Lessons Learned From the Front Lines of Artificial Intelligence Implementation
Tarik K. Alkasab, MD, PhD, Bernardo C. Bizzo, MD, PhD

Original Article

1476 Retrospective Evaluation of Artificial Intelligence Leveraging Free-Text Imaging Order Entry to Facilitate Federally Required Clinical Decision Support
David S. Gish, MD, Amy L. Ellenbogen, MD, James T. Patrie, MS, Cree M. Gaskin, MD

Our experience with an AI tool found it to successfully predict structured indications for ordering providers based upon their free-text entry, providing potential means to decrease the burden on ordering clinicians while ensuring PAMA compliance.

Opinion

1485 Data Management in Artificial Intelligence–Assisted Radiology Reporting
Bernardo C. Bizzo, MD, PhD, Renata R. Almeida, MD, PhD, Tarik K. Alkasab, MD, PhD

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Tools for evaluating and monitoring the performance of AI models in diagnostic radiology are reviewed to assist radiologists and institutions choose the right AI for their practices.

1497 **Seamless Integration of Artificial Intelligence Into the Clinical Environment: Our Experience With a Novel Pneumothorax Detection Artificial Intelligence Algorithm**

Jonathan D. Pierce, MD, Beverly Rosipko, MS, Lisa Youngblood, BS, RT(R), Robert C. Gilkeson, MD, Amit Gupta, MD, Leonardo Kayat Bittencourt, MD

We describe the deployment of an AI-enabled mobile x-ray scanner with FDA-approved algorithms for detecting pneumothoraces into an end-to-end solution capable of extracting, delivering, and prioritizing studies within our thoracic radiology clinical workflow.

Case Studies

1506 **Introducing Artificial Intelligence Applications at Our Community Hospital: A Contrarian Approach**

Ravi Jain, MD, PhD

1510 **Artificial Intelligence Support for Mammography: In-Practice Clinical Experience**

Marie Tartar, MD, Lina Le, MD, Alyssa T. Watanabe, MD, Alexander J. Enomoto, AA

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1514 **Accelerating Development and Clinical Deployment of Diagnostic Imaging Artificial Intelligence**

Menashe Benjamin, PhD, Alex Aisen, MD, Elad Benjamin, MBA

HEALTH SERVICES RESEARCH AND POLICY

Original Articles

1517 **Recommended D-Dimer Use in Suspected Pulmonary Embolism Is Insufficient to Curb the Long-Term Overutilization of CT Pulmonary Angiography**

Jarren K. T. Takaki, BS, James S. Ford, MD, Hyo-Chun Yoon, MD, PhD

Mandated use rather than recommendation of serum D-dimer testing is necessary to improve CTPA utilization in the evaluation of patients with suspected acute PE.

1525 **Redundant Imaging in Transient Ischemic Attack: Evidence From the Nationwide Emergency Department Sample**

Vincent M. Timpone, MD, Alexandria Jensen, MS, Sharon N. Poisson, MD, Margaret Reid, MS, MPH, Matthew Salzberg, MD, MBA, Premal S. Trivedi, MD, MSc

Increased imaging utilization for transient ischemic attack workup across EDs in the United States is associated with rising use of redundant imaging.
Disproportionate Use in Minor Trauma Is Driving Emergency Department Cervical Spine Imaging: An Injury Severity Score–Based Analysis

Akram Khaja, MD, Michal Horný, PhD, MSc, Patricia Balthazar, MD, Tarek N. Hanna, MD, Paul Harkey, MD, Alexander Villalobos, MD, Richard Duszak Jr, MD

Recent increases in cervical spine imaging in patients with trauma seen in the ED have been largely driven by increased use of CT in patients presenting with only minor injuries.

Disparities Associated With Patient Adherence of Post-Breast-Conserving Surgery Surveillance Imaging Protocols

Derek L. Nguyen, MD, Eniola Oluyemi, MD, Kelly S. Myers, MD, Babita Panigrahi, MD, Lisa A. Mullen, MD, Emily B. Ambinder, MD

Sociodemographic disparities exist as barriers for annual mammography surveillance in patients after breast-conserving surgery.

Secondary Interpretations of Diagnostic Imaging Examinations: Patient Liabilities and Out-of-Pocket Costs

Sean P. Doyle, PhD, Richard Duszak Jr, MD, Marta E. Heilbrun, MD, Amit M. Saindane, MD, MBA, Gelareh Sadigh, MD

In our retrospective analysis of 7,740 secondary interpretation examinations, we found that nearly half of patients were liable for some costs of secondary imaging interpretation; 17.1% made out-of-pocket payments (average of $14.55 per patient).

Diuretic Renal Scintigraphy: The State of Practice and a Potential Opportunity for Standardization

Kevin P. Banks, MD, Mary Beth Farrell, MS, Justin G. Peacock, MD, PhD, Maria Costello, MBA, Leonie L. Gordon, MD

High variability in the performance and reporting of diuretic renal scintigraphy is present among US nuclear medicine laboratories, which may have negative effects on diagnostic accuracy, diagnostic consistency, and patient management.

Data Science and Radiologic Practice

A Call for Controlled Validation Data Sets: Promoting the Safe Introduction of Artificial Intelligence in Breast Imaging

Fredrik Strand, MD, PhD, Bhavika K. Patel, MD, Bibb Allen, MD

Solutions for Cybersecurity Threats Facing Radiology Practices

Rich Wunsch, CISSP, CISM, Andrew K. Moriarity, MD
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When a numerical Step 1 score is no longer available as a factor in residency selection decisions, the prestige of the applicant’s medical school will gain outsized importance, and the Step 2 exam may replace the Step 1 exam as a single metric of decisive importance in application decisions.

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Frank J. Lexa, MD, MBA

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