Permanente Journal

Mission: The Permanente Journal advances knowledge in scientific research, clinical medicine, and innovative health care delivery.

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ON THE COVER

"Autumn Foliage" by Lynne D Calonico, PhD, was taken in Central Park in New York City, using a 35mm Pentax K20D, 16-45mm zoom, 1/90 sec, f 4.0.

Dr Calonico is a Psychologist with the Kaiser Permanente Sacramento Outpatient Child and Adolescent Psychiatry Clinic. Photography, especially nature photography,

has been an avocation since her undergraduate years. She also worked for several years during the predigital era doing light microscopy and transmission electron microscopy.

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ORIGINAL RESEARCH & CONTRIBUTIONS

4 Comparative Effectiveness Topics from a Large, Integrated Delivery System. Kim N Danforth, ScD; Carrie D Patnode, PhD; Tanya J Kapka, MD; Melissa G Butler, PharmD, PhD; Bernadette Collins, PhD; Amy Compton-Phillips, MD; Raymond J Baxter, PhD; Jed Weissberg, MD, FACP; Elizabeth A McGlynn, PhD; Evelyn P Whitlock, MD

An electronic survey requesting nominations of comparative effectiveness research questions was sent to 792 clinical and operational leaders in Kaiser Permanente—83% of whom had direct clinical roles. From 181 individuals, 320 research questions were nominated. Questions most frequently addressed cardiovascular and peripheral vascular disease; obesity, diabetes, endocrinology, and metabolic disorders; or service delivery and systems-level questions. Ninety-five highpriority research questions were identified. These inform the national discussion regarding comparative effectiveness research, engaging real-world stakeholders in setting a health care research agenda.

14 Challenges in Evaluating All-Cause Hospital Readmission Measures for Use as National Consensus Standards. Alexis Morgan, MPH; Adeela Khan, MPH; Taroon Amin, MA, MPH, PhD(c)

Through the evaluation of measures for endorsement, several overarching issues in measuring all-cause readmissions were identified, including statistical modeling and the usability of the measures for quality improvement and accountability. Additionally, it was decided that, for the first time, quality monitoring and accountability of readmissions will take place at the health plan level. Measuring at various levels of accountability reinforces the idea that multiple stakeholders have a responsibility and a role to reduce readmissions. These measures can help reduce the substantial financial and emotional stress that readmissions place on the health care system.

19 Hypovitaminosis D Correction and High-Sensitivity C-Reactive Protein Levels in Hypertensive Adults.

Nathan Carlson, MD; Robert Mah, MD; Maria Aburto; Mark Jason Peters, MD; Meagan V Dupper, MD; Lie Hong Chen, DrPH

One hundred eight subjects who were vitamin D insufficient or deficient completed this study. The mean 25-OH-vitamin D level was 20.07 ng/mL before treatment and 43.92 ng/mL after treatment. Posttreatment vitamin D levels were in the normal range for 91% of the subjects. No statistically significant changes in hs-CRP level were detected after the vitamin D treatment was administered and a posttreatment vitamin D level above 30 ng/mL was confirmed.

22 From the Patient's Perspective: Is There a Need to Improve the Quality of Informed Consent for Surgery in Training Hospitals? Shamir O Cawich, DM; Alan T Barnett, DM; Ivor W Crandon, FRCS; Samantha D Drew; Georgiana Gordon-Strachan, BSc, PhD

A postoperative survey was administered to all consecutive able and willing adult patients who underwent the presurgical informed consent process with surgical residents over a 5-week period. There were 210 surveys completed. Forty-five patients believed that they were instructed to sign the consent document with minimal discussion. At termination of the consent process, only 70% of the 210 patients reported that they signed the consent form voluntarily. Overall, 67% of patients thought the current informed consent process was unsatisfactory.

27 How Asking Patients a Simple Question Enhances Care at the Bedside: Medical Students as Agents of Quality Improvement. Hope Olivia Ward; Sarah Kibble; Gney Mehta; Marc Franklin; Joshua Kovoor; Aled Jones, BN (Hons), PhD; Sukhmeet Panesar, BSc (Hons), MBBS; Andrew CarsonStevens, MBBCh, MPhil

Medical students have traditionally played a passive role in the delivery of health care. Using the Model for Improvement to adapt the Ask One Question concept for local use, medical students at Cardiff University (United Kingdom) asked 120 patients one question. On a simple but effective level, Ask One Question reflects good manners and is a demonstrable competency of patient-centered practice. It is a vehicle for enabling students to seek improvements in health care and initiate relevant actions to improve the patient experience at the bedside.

Special Report

Making Hospitals Safer for Older Adults: Updating Quality Metrics by Understanding Hospital-Acquired Delirium and Its Link to Falls.

Eric A Lee, MD; Nancy E Gibbs, MD;

Eric A Lee, MD; Nancy E Gibbs, MD; Linda Fahey, RN, NP, MSN; Teri L Whiffen, RN, BSN, MHA

Because of reduced "reserve capacity," hospitalized older adults are at high risk of developing geriatric syndromes such as delirium and falls. Patients who experience geriatric syndromes in the hospital are more likely to have a longer length of stay, higher risk of readmissions, and worse medical outcomes. Incident delirium in hospitalized geriatric patients has been shown to be preventable by intervening in established risk factors. Prevention of hospital-related falls has not been consistently demonstrated. Analysis from Kaiser Permanente data demonstrated a correlation with delirium and hospitalrelated falls.

Special Report

37 Preventing Falls in the Geriatric
Population. Aimee Lee, MD; Kuo-Wei
Lee, MD; Peter Khang, MD, MPH, FAAFP

Falls are all too common in the geriatric population, and they have devastating consequences. They are the leading cause of injury and death by injury in adults over age 65 years. As patients age, they may experience stiffened joints, decreased muscle strength, and impaired neurologic feedback. These changes, in combination with other risk factors, increase the likelihood of falls. The strongest independent risk factors for falls are previous falls, weakness, gait and balance impairments, and use of psychoactive medications.

Special Report

41 Establishing a Portfolio of Quality-Improvement Projects in Pediatric Surgery through Advanced Improvement Leadership Systems. Betsy T Gerrein, DNP, CPNP; Christina E Williams, MS; Daniel von Allmen, MD

Formal quality-improvement (QI) projects require that participants are educated in QI methods. However, orchestrating a portfolio of projects that addresses the strategic mission of the institution requires an extension of basic QI training to provide the division or business unit with the capacity to successfully develop and manage the portfolio. Advanced Improvement Leadership Systems is a program to help units create a meaningful portfolio.

REVIEW ARTICLES

47 Deep Brain Stimulation for the Treatment of Severe, Medically Refractory Obsessive-Compulsive Disorder.

Mark Sedrak, MD; William Wong, MD; Paul Wilson, MD; Diana Bruce, PA-C, MSHS; Ivan Bernstein, PA-C, MSPAS, MPH; Suketu Khandhar, MD; Conrad Pappas, MD, PhD; Gary Heit, MD, PhD; Eric Sabelman, PhD

Deep brain stimulation is a rapidly expanding therapy initially designed for the treatment of movement disorders and pain syndromes. Psychiatric diseases can be refractory and severe, leading to high medical costs, significant morbidity, and even death. Whereas surgery for psychiatric disease used to include destructive procedures, deep brain stimulation allows safe, reversible, and adjustable treatment that can be tailored for each patient.

SOUL OF THE HEALER

Original Visual Art

- **40 "Okavango Sunset"**David Clarke, MD
- **79 "Arctic Ice Pack"** Carol S Gee, MD
- **89 "Boatbuilding On The Aspetuck"** Phillip LaBorie
- **92 "(858) 457-137"** Eric Blau, MD, and Li Huai

52 Evaluating the State of Quality-Improvement Science through Evidence Synthesis: Insights from the Closing the Quality Gap Series.

> Kathryn M McDonald, MM; Ellen M Schultz, MS; Christine Chang, MD, MPH

The Closing the Quality Gap series from the Agency for Healthcare Research and Quality summarizes evidence for eight high-priority health care topics, providing insight into the "state of the science" of quality improvement (QI). Patient-focused and systems-focused strategies were generally more effective than clinician-focused strategies. Topic reviewers observed heterogeneity in outcomes used for QI evaluations, weaknesses in study design, and incomplete reporting.

62 Probiotics and Liver Disease.

Vishal Sharma, MD, DM; Shashank Garg, MD; Sourabh Aggarwal, MD

Intestinal microbiota play an important role in health and disease. The gut-liver axis provides for an interaction between bacterial components like lipopolysaccharide and hepatic receptors. This review focuses on changes in gut microbiota in the context of liver disease and possible roles of probiotics, prebiotics, and synbiotics in liver disease.

68 Antivascular Endothelial Growth Factor Antibody for Treatment of Glioblastoma Multiforme. Joseph A Hanson; Frank P K Hsu, MD, PhD; Arun T Jacob, MD; Daniela A Bota, MD, PhD; Daniela Alexandru, MD

Current first-line therapy for glioblastoma multiforme (GBM) includes surgery with adjuvant radiation therapy and cytotoxic chemotherapy, but virtually all tumors recur. Given the highly vascular nature of GBM and its high expression of vascular endothelial growth factor and other angiogenic factors, recent investigation has turned to bevacizumab, an antivascular endothelial growth factor monoclonal antibody, for treatment of recurrent GBM.

COMMENTARY

75 Choosing Wisely and Beyond: Shared
Decision Making and Chronic Kidney
Disease. Phillip Tuso, MD

Nephrologists have multiple opportunities to discuss treatment options with patients throughout the course of their disease. However, despite these opportunities most patients beginning dialysis have not experienced shared decision making with their physicians. The shared decision-making process may help patients understand the importance of being prepared to start dialysis and the benefits of maximal conservative management.

EDITORIAL

80 Integrating Naturopathy: Can We Move Forward?

Charles R Elder, MD, MPH, FACP

Although acupuncture and chiropractic care have achieved some measure of acceptance within mainstream medicine, the integrative role for naturopathy has yet to be well specified. This essay provides a discussion of the potential benefits of naturopathic medicine, as well as an overview of current obstacles to its integration. Action steps toward improving communication between allopathic and naturopathic physicians are suggested.

NARRATIVE MEDICINE

84 The Power of Reflective Writing: Narrative Medicine and Medical Education.

Samir Johna, MD; Ahmed Dehal, MD

Even before technology gained the upper hand, patients were healed by physicians when most of the remedies were useless if not harmful, and when remedies were driven by theories that did not stand the test of time. To some extent, the art of fostering the sacred physician-patient relationship might have played a major role in the dramatic healing process.

86 Boatbuilding On The Aspetuck: An Artist's Thoughts About Art, Aging, and Anxiety. Phillip LaBorie

I'm not a practicing psychologist; I don't have a degree in psychiatry; and I'm not an expert in gerontology; but having been up the creek without a paddle a few times, I can draw some conclusions about art, aging, anxiety, and how the Aspetuck figures into this mélange.

90 Illness and Death in the Universe. Carlos Franco-Paredes, MD, MPH

My mother's unexpected death unmercifully uncovered the landscape of our human frailties in the cosmic immensity and eliminated my Machiavellian stand in this complex world. Sadness eventually transitioned into the rationalization that our predicament of life and death deserves to be viewed through the lens of our biologic heritage in a larger and highly dynamic natural scene.





See page 2 for additional content from *The Permanente Journal* available online only.





Available at: www.thepermanentejournal.org/issues/2013/fall.html

CLINICAL MEDICINE

ECG Diagnosis: Acute Pericarditis. Kevin P Masek, MD; Joel T Levis, MD, PhD, FACEP, FAAFM

Acute pericarditis is an inflammation of the pericardium that can result in chest pain, pericardial friction rub, and serial electrocardiogram changes. The most common causes of pericarditis are viral or idiopathic in developed countries, and tuberculosis in developing countries. Patients must have two of the following four clinical criteria for diagnosis: typical pericardial chest pain, pericardial friction rub, widespread ST-segment elevation or PR depression, and new or worsening pericardial effusion on echocardiography.

Image Diagnosis: A 16 Year Old with Chest Pain after Blunt Trauma.

Minh Van Le, MD; Clifford Swap, MD

A 16-year-old male developed chest pain immediately after he was tackled in a football game one hour before presenting to the Emergency Department. Examination of the chest wall revealed tenderness to palpation of the right proximal clavicle with a depression of the clavicular head.

Image Diagnosis: Pericardial Cyst. Jonathan Kei, MD, MPH

A 50-year-old woman presented to the Emergency Department with 5 days of diffuse abdominal pain and constipation. An acute abdominal series was obtained to rule out a bowel obstruction during her workup. The upright chest image of the acute abdominal series demonstrated a smoothly rounded mass at the right cardiophrenic angle.

COMMENTARY

"Wherever You Go, Remember Africa": Memories of a Medical Experience in Kenya.

George F Longstreth, MD

A short time spent volunteering in a small, rural Kenyan hospital required me to revive dormant medical skills. Much could be done despite markedly limited resources. Major contrasts with my experiences in the US, especially the harsh living conditions, types of illnesses, and more advanced disease at presentation, left indelible memories.

NURSING RESEARCH & PRACTICE

Commentary

Twelve Essential Tools for Living the Life of Whole Person Health Care.

Marilyn Schlitz, PhD; Elizabeth Valentina

In the study of whole person health care, a series of interviews were conducted with heath care experts who are at the leading edge of the new model of medicine, which led to a series of simple tools: examine your worldview, take an integral perspective, develop healing relationships, listen deeply for healing wisdom, cultivate loving-kindness, model optimal health, develop a support system, create healing rituals, set intentions for optimal healing, stay informed, re-center yourself throughout the day, and death makes life possible.

CME

IN OUR NEXT ISSUE

REVIEW ARTICLE

Investigation of Women with Postmenopausal Uterine Bleeding: Clinical Practice Recommendations.
Malcolm G Munro, MD, FRCS(c), FACOG;

The Southern California Permanente Medical Group's Abnormal Uterine Bleeding Working Group ANNOUNCEMENT:

CME Credits Now Available for Reviewers

See inside back cover for details.

EDITORIAL & PUBLISHING OFFICE

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