Research

Oral Appliance Therapy in Sleepy Subjects 1278
In a randomized clinical trial, Marklund and colleagues investigated the effect of a custom-made, adjustable oral appliance on subjective daytime sleepiness among 91 patients with snoring or mild to moderate sleep apnea. Subjective sleepiness was gauged using the Epworth Sleepiness Scale. Objective sleepiness was also measured using the Oxford Sleep Resistance Test. Marklund and colleagues found that the oral appliance reduces obstructive sleep apneas, snoring, and possibly restless leg syndrome but has no effect on daytime sleepiness.

Invited Commentary 1285

Medical Ward Interdisciplinary Team Care 1288
In a systematic review, Pannick and colleagues evaluate the effect of medical ward interdisciplinary team care interventions on objective patient outcomes. Interdisciplinary interventions are not typically effective when judged against studies citing length of stay, complications, readmission, or mortality as primary patient outcomes, but there is evidence that improved interdisciplinary work may actually reduce overall complications of care in the medical ward. Alongside credible quality metrics of evaluation, future work should establish how best to implement interdisciplinary team care interventions in a medical ward setting.

Invited Commentary 1298

State Organ Donation and Transplantation Policies 1323
In this study, Chatterjee and colleagues used publicly available data on live and deceased organ donation and transplantation across US states collected from 1988 to 2010 to evaluate whether states that adopted policies of first-person consent, the establishment of donor registries, dedicated revenue streams for donor recruitment activities, education initiatives, paid leave for live donors, and tax incentives improved the supply of organs for transplant. Overall, these policies had little effect on the supply of organs or transplantation rates. However, establishing policies that created a protected fund for donation promotion activities led to an additional 15 annual transplants per state, primarily due to increased deceased donation. Understanding the relative effectiveness of revenue policies may help in the designing of new policies to curtail widening gaps between organ supply and demand.

Invited Commentary 1329 Related Article 1406

LESS IS MORE

High Antibiotic Use in Nursing Homes 1331
In a population-wide study of more than 100,000 residents of more than 600 nursing homes in Ontario, Canada, Daneman and colleagues found variability in antibiotic use from as low as 20 antibiotic-days to as high as 200 antibiotic-days per 1000 resident-days. Antibiotic-related adverse events were more common in residents of high-antibiotic use nursing homes compared with low-antibiotic use nursing homes. This trend affected not only residents that directly received antibiotics but also residents who did not receive antibiotics. After accounting for nursing home and resident risk factors, it was found that residents had a 24% increased risk of experiencing an antibiotic-related adverse event in a high-antibiotic use nursing home vs low use. This suggests that nursing home antibiotic stewardship efforts could potentially improve the safety of all nursing home residents.

Invited Commentary 1339
Cardiac Implantable Electronic Devices and Sudden Death

Causes of sudden death with cardiac implantable electronic devices (CIED) are relatively unknown, because interrogations and autopsies of sudden deaths with CIEDs are rarely performed. As part of the ongoing Postmortem Systemic Investigation of Sudden Cardiac Death (POST SCD) study in San Francisco, Tseng and colleagues determined the causes of sudden death by systematic interrogation and autopsy through active surveillance of all deaths reported over 35 months and identified concerns about CIED function that might otherwise not have been observed.

Medical Home Intervention With Shared Savings

Friedberg and colleagues evaluated the northeast region of the Pennsylvania Chronic Care Initiative, a medical home intervention differing from other interventions by including shared savings incentives and feedback on patients' hospital and emergency department (ED) use for participating practices. Relative to comparison practices over a 3-year intervention period, practices participating in the Pennsylvania Chronic Care Initiative had better performance on measures of diabetes care and breast cancer screening; lower rates of all-cause hospitalization, all-cause ED visits, ambulatory care-sensitive ED visits, and ambulatory visits to specialists; and higher rates of ambulatory primary care visits. These findings suggest that continued evaluation of medical home interventions with different designs can help identify active ingredients in efforts to improve primary care.

Primary Care Patient Drug Use Screening

Illicit drug use is prevalent in primary care (PC), but existing drug use screening instruments are not appropriate for routine use in PC. Tiet and colleagues revised questions from existing screening instruments and used signal detection analyses to identify the most cost-effective items to develop the Screen of Drug Use (SoDU) using data gathered from PC patients recruited from a Department of Veterans Affair medical center. The 2-item SoDU was 100% sensitive and 94% specific based on 643 patients, and 92% sensitive and 93% specific when validated on a second sample of 640 patients. It also has comparable statistical properties for patient subgroups, including age, sex, racial and/or ethnic background, marital status, educational level, and posttraumatic stress disorder status.

Clinical Review & Education

Cardiac Transplantation—Sinking the Lifeboat

Stevenson notes that the number of donor hearts transplanted in the United States has remained about 2200 each year for the last 20 years. Yet the number of transplant centers has increased and the criteria for transplantation have broadened. While waiting for a transplant, many candidates now develop life-threatening complications of a ventricular assist device implanted to avert death. However, some affluent patients can afford to temporarily relocate to obtain a transplant without a prior ventricular assist device in regions where waiting times are shorter. The ethics of allocating hearts for transplantation recall the classic lifeboat dilemma: how many people can crowd onto a lifeboat without it sinking?

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