In This Issue of JAMA

Research

Screening Tests for Cervical Cancer 43
Almost all cervical cancers are associated with a persistent oncogenic human papillomavirus (HPV) infection. In a randomized clinical trial, Ogilvie and colleagues screened 19,009 women for cervical cancer with HPV testing or cytology and found that women tested for HPV were less likely than women screened with cytology to have grade 3 or worse cervical neoplasia at 48 months after randomization. Although co-testing has been recommended, an Editorial by Massad suggests that cervical cytology testing adds little to the accuracy of HPV testing while increasing costs and false-positive results.

Safety and Efficacy of Insulin Analogs 53
Long-acting insulin analogs modestly reduce the risk of nocturnal hypoglycemia compared with human insulin but have not been shown to reduce the risk of severe hypoglycemia or to improve glycemic control. Lipska and colleagues conducted a retrospective observational study of 25,489 patients with type 2 diabetes and found no clinical advantage for treatment with a basal insulin analog vs neutral protamine Hagedorn (NPH) insulin. In an Editorial, Crowley and Maciejewski suggest that reemphasizing NPH insulin for type 2 diabetes could help to reduce the high costs of diabetes care.

Appropriate Use of Implantable Cardioverter-Defibrillators 63
In 2010, the US Department of Justice investigated potential overuse of implantable cardioverter-defibrillators and negotiated financial settlements with more than 500 hospitals. In a serial cross-sectional analysis of 300,151 primary prevention implantable cardioverter-defibrillators implanted at 1,809 hospitals between 2007 and 2015, Desai and colleagues observed declines in the proportion of devices not meeting evidence-based criteria for implantation. In an Editorial, Heidenreich suggests that physicians and hospitals should develop appropriate use criteria for tests and procedures and participate in registries for tracking appropriate care.

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Clinical Management of Patients With Infective Endocarditis 72
Treatment considerations for patients with infective endocarditis include characteristics of the causative pathogen, presence of a foreign body, and the patient's cardiac anatomy. Wang and colleagues review the changing epidemiology and current treatment of infective endocarditis.

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Endocarditis

Estimating Risk in Studies of Health and Disease 84
The odds ratio measures the strength of association between a risk factor and a study outcome. In this JAMA Guide to Statistics and Methods, Norton and colleagues discuss the interpretation of odds ratios in clinical research.

Acute Lower Gastrointestinal Bleeding 86
In this JAMA Clinical Guidelines Synopsis of a 2016 guideline developed by the American College of Gastroenterology, Sengupta and Cifu discuss the need for more research to guide the management of bleeding from the colon or rectum.

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Editor's Audio Summary
Howard Bauchner, MD, summarizes and comments on this week’s issue.

Visual Abstract
"Effect of Screening With Primary Cervical HPV Testing vs Cytology Testing on High-Grade Cervical Intraepithelial Neoplasia at 48 Months: The HPV FOCAL Randomized Clinical Trial"

Video
Musical Chairs: Using Wheelchair Ballroom Dance in Disability Education

Author Audio Interview
Kasia J. Lipska, MD, MHS, author of “Association of Initiation of Basal Insulin Analog vs Neutral Protamine Hagedorn Insulin With Hypoglycemia-Related Emergency Department Visits or Hospital Admissions and With Glycemic Control in Patients With Type 2 Diabetes”

Audio Interview
Adam Gazzaley, MD, PhD, University of California, San Francisco, profiled in “Adam Gazzaley, MD, PhD: Developing Prescribable Video Games”