Research

Costs and Outcomes of Same-Day Discharge After PCI 1041
Contemporary patterns of same-day discharge (SDD) after elective percutaneous coronary intervention (PCI) with respect to hospital variation, costs, and safety in the United States are unknown. In an observational cross-sectional cohort study, Amin and coauthors examined 672,470 patients enrolled in the nationally representative Premier Healthcare Database undergoing elective PCI in 493 hospitals. The adjusted rate of SDD increased from 0.4% in 2006 to 6.3% in 2015, with substantial hospital variation ranging from 0% to 83%. There was no difference between SDD and non-SDD patients in risk of death, bleeding, kidney injury, or myocardial infarction at 30, 90, or 365 days, but SDD was associated with a large cost savings of $5128 per procedure.

Asymptomatic AS Outcomes in Heart Valve Clinics 1060
The outcomes of patients with asymptomatic aortic stenosis (AS) in the current era remain uncertain. Lancellotti and coauthors followed up 1375 patients, including 861 (62.6%) with severe AS at baseline, in 10 heart valve centers. Overall survival during medical management was 93% and 75% at 2 and 8 years, respectively. Sudden death was rare (0.65% over the study duration). Aortic valve replacement was performed in 542 patients (39.4%) during a mean follow-up of 27 months, including 154 with moderate AS at entry who progressed to severe AS. Peak aortic jet velocity (greater than 5 m/s) and left ventricular ejection fraction (less than 60%) were associated with all-cause and cardiovascular mortality both before and after aortic valve replacement.

Weather and Incidence of Myocardial Infarction in Sweden 1081
The influence of weather on myocardial infarction (MI) incidence remains a topic of interest. Mohammad and coauthors merged daily weather data from the Swedish Meteorological and Hydrological Institute with Swedish Web-System for Enhancement and Development of Evidence-Based Care in Heart Disease Evaluated According to Recommended Therapies (SWEDEHEART) data during 1998 to 2013, which included all 280,873 patients with MI (92,044 with ST-elevation MI); meteorological data were available for 274,029 patients (97.6%). A higher incidence of MI was observed on days with low air temperature, low atmospheric air pressure, high wind velocity, and shorter sunshine duration. These data add to current knowledge on weather as a potential trigger of MI.

Long-term Outcomes of Unrecognized Myocardial Infarction 1101
Long-term outcomes of individuals with clinically unrecognized myocardial infarction (UMI) detected by cardiac magnetic resonance imaging are not known. Acharya and coauthors performed a cohort study of 935 participants in Iceland (mean age, 76 years), with 100% data capture up to 13.3 years. The 156 individuals with UMI (16.7%) had lower short-term mortality than the 91 individuals with recognized MI (RMI), but with longer-term follow-up, mortality rates of UMI and RMI were not statistically different. Those with UMI had smaller infarct size and better left ventricular function, which may contribute to the short-term results, but those with RMI had better control of smoking, hypertension, and hypercholesterolemia.