factors diabetes, hypertension and obesity. E/e' was significantly lower in patients who performed ≥150 min/week of physical exercise (n=220) compared to <150 min/week (8.6±2.7 vs 10.3±3.5, 95% CI 1.1–2.4, p<0.001). For every increase of 10 min of physical activity per week, E/e' decreased by 4%. 

Conclusions: CAD-patients who perform regular physical exercise ≥150 min/week have significantly better left ventricular diastolic function measured by E/e'. Higher VO2 peak as well as higher weekly physical exercise outweighed the other modifiable cardiovascular risk factors obesity, diabetes and hypertension in this high-risk patient population.

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P6037 | BEDSIDE
Beta-blocker dose is associated with mortality after myocardial infarction - a nationwide study

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Background: Beta-blocker (BB) treatment reduces mortality after myocardial infarction (MI). The BB dose entailing the largest mortality reduction is unknown. 

Purpose: To examine the association between BB dose and mortality after MI. 

Methods: All patients admitted for first-time MI in Denmark between 1 July 2004 and 31 December 2014 were identified in the Danish National Patient Registry. Using the Danish Civil Person Registry, patients alive on day 15 after MI admission were followed until first occurrence of death, emigration, or 31 December 2014.

Conclusions: This nationwide study showed that any BB dose during the first year after MI and any BB dose >12.5% TD beyond the first year after MI were associated with significant mortality reduction. During the first year after MI, doses >25–50% TD were associated with maximal mortality reduction. Doses >50% TD were associated with the lowest mortality beyond the first year.

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P6038 | BEDSIDE
Treatment gaps and potential cardiovascular risk reduction from expanded statin use in the US and England

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Background: Updated national guidelines in the US and UK expand the indications for statin therapy in primary prevention of cardiovascular disease (CVD) to adults with moderate CVD risk but many adults at high risk still remain untreated. 

Objectives: To identify treatment gaps in US and English adults at moderate (>7.5% to <20% 10-year risk of CVD in the US and ≥10% to <20% risk in England) and high risk (>20% risk), and to estimate the number of CVD events that would be prevented from expanding statin therapy to those who are currently untreated.

Methods: Simulation study using nationally representative samples of CVD-free adults aged 40–75 years from the National Health and Nutrition Examination Survey 2007–2012 (n=7,687) for the US, and the Health Survey for England 2009-2013 (n=10,375), and risk algorithms from each country’s guidelines.

Results: Close to half of adults at high CVD risk in the US (49.7%) and England (46.0%) were not receiving statins. Expanding statin use to 5.27 million untreated high-risk adults in the US would save 384,000 (305,000–461,000) CVD events in the next 10 years compared with 616,000 (493,000–738,000) CVD events that would be prevented from treating 20.29 million moderate-risk adults. In England, treating 1.45 million high-risk adults would save 101,000 (95% CI=81,000–120,000) CVD events compared with 128,000 (103,000–154,000) CVD events prevented from treating 3.64 million moderate-risk adults. 

Conclusions and relevance: In the US and England, expanding statin therapy to untreated moderate-risk adults would prevent a comparable number of events as expanding statin use to a much smaller number of currently untreated high-risk adults. A large potential for CVD prevention remains from improving coverage of statin therapy among high-risk adults.

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