analysis long PR interval compared with healthy individuals demonstrated significant associations with age (age years: OR =1.1 p < 0.001), gender (male gender: OR =2.6; p < 0.0001) and with elevated values of TroT (TroT> 10 pg/ml: OR =2.1; p < 0.008) and a relevant but not statistically significant association with elevated values of LA and also and NT-proBNP. We plan to repeat the analysis for a larger set of individuals.

**Conclusions:** Differences in echocardiographic parameters and in hsTroT and NT-proBNP levels indicate that PR interval prolongation might be considered as intermediate phenotype for AF. Longitudinal studies are needed to prove these results.

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**Background:**

Atrial fibrillation (AF) is an emerging global epidemic associated with significant morbidity and mortality. Much of the burden associated with this condition is related to health care resource utilisation, with hospitalisations known to be the main driver of this.

**Purpose:** This study intends to characterise the change in hospitalisations due to AF over a 20 year period across all hospitals in Australia, and to compare this to two other common cardiovascular conditions: myocardial infarction (MI) and heart failure (HF). Furthermore, we sought to characterise changes in the use of AF ablation, with a view towards identifying the contribution of this procedure to rates of hospitalisations for AF.

**Methods:** Data were obtained from the Australian Institute of Health and Welfare (AIHW) which maintains information on all inpatient admissions from hospitals across Australia. Hospitalisations with a principal diagnosis of AF, MI or HF were obtained from 1993-2013. Time trends in the aggregate yearly numbers of hospitalisations due to each condition were assessed using negative binomial regression models. The data concerning AF ablation were extracted for the years 2000-2013 from the procedure database maintained by the AIHW, and analysed applying the same model. All models included an offset term for the logarithm of the estimated midyear Australian population.

**Results:** Over the 20-year period, there was a relative increase in AF hospitalisations of 295% to a total of 61424 in 2013, representing an almost doubling of AF hospitalisations since the beginning of this century. In comparison, MI and HF increased by 73% and 39% to a total of 54116 and 53643 hospitalisations respectively in 2013. Taking into account population changes, there was an annual increase in AF hospitalisations of 5.2% (incidence rate ratio [IRR] 1.05; 95% CI 1.05 - 1.06; P < 0.001). In contrast, there was only a 2.2% increase per annum for MI [IRR 1.02; 95% CI 1.02 - 1.03; P < 0.001] and negligible annual change for HF hospitalisations [IRR 1.00; 95% CI 0.99 - 1.00; P > 0.078]. Whilst AF ablation rates significantly increased [IRR 1.24; 95% CI 1.20:1.28; P < 0.001], the procedure accounted for 2.8% of all hospitalisations due to AF in 2013.

**Conclusions:** The burden of hospitalisations due to AF in Australia continues to demonstrate a relentless rise, and is far greater than that of other common cardiovascular conditions including MI and HF. Whilst the use of AF ablation has increased significantly, it is unlikely to account for the observed rise in AF hospitalisations. This has important implications for healthcare systems worldwide, with new models of care delivery urgently needed to stem the rising tide of health care burden due to AF.

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**Background:** An integrated AF-Clinic reduces all-cause mortality in patients with atrial fibrillation.

**Methods:** The study randomised 712 AF patients to the specialised AF-Clinic - AFC (n=356) vs Usual Care - UC (n=356). Data was collected between 2007 - 2009 with a follow-up of at least 12 months. AFC patients underwent protocolized clinical evaluation and counselling, and were actively involved in their care process (e.g. patient education and empowerment to undertake self-management interventions). Patients were seen by a nurse specialist, supervised by a cardiologist, using a dedicated software system to support clinical decision making. UC patients were treated by a cardiologist in the outpatient setting. The RCT data was used to perform a sub-analysis to investigate a cause-mortality.

**Results:** At baseline, mean age was 67±13, and 418 pts (59%) were male. Underlying comorbidity: hypertension 380 pts (53%), heart failure 50 pts (7%), coronary artery disease 71 pts (10%), stroke 89 pts (13%). Previously we reported the occurrence in the primary endpoint in 14.9% vs 20.8% in pts allocated to AFC vs UC respectively (hazard ratio [HR] 0.65; 95% confidence interval [CI] 0.45 to 0.93; P < 0.017). In the present sub-analysis we found that after a mean follow-up of 22 months, all-cause mortality in this population resulted in 13 pts (3.7%) in AFC vs 29 pts (8.1%) in UC [HR 0.45; 95% CI 0.23 to 0.85; P < 0.014]. This includes CV mortality in 4 AFC pts (1.1%) vs 14 pts (3.9%) in UC (HR 0.28; 95% CI 0.09 to 0.85; P < 0.025). Further, 9 pts (2.5%) died in AFC due to a non-CV reason versus 15 pts (4.2%) in UC (HR 0.59; 95% CI 0.26 to 1.34; P < 0.206).

**Conclusions:** Integrated care in AF patients, in terms of a specialised AF-Clinic, resulted in significant improvement of CV hospitalization and mortality. This sub-analysis importantly demonstrates a significant reduction in all-cause mortality, providing compelling evidence for the notion that an integrated care approach should be implemented in AF management, which may contribute to improve clinical outcomes in AF patients and reduce the burden on the health care system.

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**Background:** trends in hospital admissions for atrial fibrillation in Australia: a relentless rise.

**Methods:** For AF, MI or HF hospitalisations were extracted for the years 2000-2013 from the procedure database maintained by the AIHW, and analysed applying the same model. All models included an offset term for the logarithm of the estimated midyear Australian population.

**Results:** Over the 20-year period, there was a relative increase in AF hospitalisations of 295% to a total of 61424 in 2013, representing an almost doubling of AF hospitalisations since the beginning of this century. In comparison, MI and HF increased by 73% and 39% to a total of 54116 and 53643 hospitalisations respectively in 2013. Taking into account population changes, there was an annual increase in AF hospitalisations of 5.2% (incidence rate ratio [IRR] 1.05; 95% CI 1.05 - 1.06; P < 0.001). In contrast, there was only a 2.2% increase per annum for MI [IRR 1.02; 95% CI 1.02 - 1.03; P < 0.001] and negligible annual change for HF hospitalisations [IRR 1.00; 95% CI 0.99 - 1.00; P > 0.078]. Whilst AF ablation rates significantly increased [IRR 1.24; 95% CI 1.20:1.28; P < 0.001], the procedure accounted for 2.8% of all hospitalisations due to AF in 2013.

**Conclusions:** The burden of hospitalisations due to AF in Australia continues to demonstrate a relentless rise, and is far greater than that of other common cardiovascular conditions including MI and HF. Whilst the use of AF ablation has increased significantly, it is unlikely to account for the observed rise in AF hospitalisations. This has significant implications for healthcare systems worldwide, with new models of care delivery urgently needed to stem the rising tide of health care burden due to AF.

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**Background:** An integrated AF-Clinic reduces all-cause mortality in patients with atrial fibrillation.

**Methods:** Data were collected from the Atrial Fibrillation Ablation Long-term Registry, a prospective, multinational study conducted by the European Heart Rhythm Association (EHRA) of the European Society of Cardiology (ESC) under the EURObservational Research Programme (EORP), Sophia Antipolis, France; University Medical Center Groningen, Groningen, Netherlands; Institute for Clinical and Experimental Medicine (IKEM), Cardiology, Prague, Czech Republic; EnCor Medical Center, Electrophysiology, Rotterdam, Netherlands; Foundation Jimenez Diaz, Cardiology, Madrid, Spain; ANMCO Research Center, Firenze, Italy; State Research Institute of Circulation Pathology, Novosibirsk, Russian Federation; University of Pavia, Cardiology, Pavia, Italy; Uppsala University Hospital, Cardiology, Uppsala, Sweden.

**Methods:** This study intended to characterise the change in hospitalisations due to AF over a 20 year period across all hospitals in Australia, and to compare this to two other common cardiovascular conditions: myocardial infarction (MI) and heart failure (HF). Furthermore, we sought to characterise changes in the use of AF ablation, with a view towards identifying the contribution of this procedure to rates of hospitalisations for AF.

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**Conclusions:** The burden of hospitalisations due to AF in Australia continues to demonstrate a relentless rise, and is far greater than that of other common cardiovascular conditions including MI and HF. Whilst the use of AF ablation has increased significantly, it is unlikely to account for the observed rise in AF hospitalisations. This has significant implications for healthcare systems worldwide, with new models of care delivery urgently needed to stem the rising tide of health care burden due to AF.