OBJECTIVES: To characterize the real-world profile of heart failure (HF) patients with reduced ejection fraction (REF) and their treatment patterns in China.

METHODS: A retrospective chart review was conducted in 9 hospitals in 5 key regions (Beijing, Shanghai, Wuhan, Chengdu, Guangzhou) to capture patient profiles and to evaluate treatment patterns in patients following hospitalization for HF. Patients hospitalized for HF in 2005-2008 were identified. A total of 805 HF subjects were identified and reviewed for healthcare treatment and costs between 2000 and 2011. Data were collected from the first HF hospitalization until the last date of data entry or death. RESULTS: A total of 460 patients with HF-REF and at least one hospitalization were followed for an average of 2.86 years. Patients were aged 65.9 (SD 10.5) years on average. On average, HF-REF patients had 2.9 hospitalizations during follow-up. At the first hospitalization, severity was most frequently New York Heart Association (NYHA) Class III in 46.4% of patients, followed by Class IV in 27.1% and Class II in 26.0%. HF severity increased with subsequent hospitalizations. The most common comorbid condition was idiopathic dilated cardiomyopathy (49.3%) followed by hypertension (42.2%), atrial fibrillation (24.1%) and ischemic heart disease (20.2%). Median length of stay for the first hospitalization was 10 days with the subsequent 3 hospitalizations ranging between 8-9 days. The overall death rate during the follow-up period was 19.3% with regional variance; 0% in Shanghai to 32% in Wuhan, however Shanghai subjects had milder HF. The mean time to death was 747.0 ± 568.9 days from first hospitalization for those who died (median: 779.0). CONCLUSIONS: This large chart review provides a recent, real-world patient profile of HF-REF patients following hospitalization for HF in China. Heart failure treatment presents a large burden to the health care system in the 5 major regions in China, with some regional variations.

PCV98 IMPACT OF ATRIAL FIBRILLATION ON HEALTH CARE UTILIZATION AMONG PATIENTS WITH MYOCARDIAL INFARCTION:
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OBJECTIVES: Atrial fibrillation (AF), the most common sustained arrhythmia, confers an increased risk of death in patients with myocardial infarction (MI). The onset of AF in relation to MI differentially impacts survival, with AF developing after MI corresponding to the worst outcome. However, the impact of AF and its timing on healthcare resource utilization after MI is unknown. METHODS: The risk of hospitalization, emergency department (ED) visits, and outpatient office visits associated with prior, early-onset (<30 days post-MI) and late-onset (>30 days post-MI) AF was assessed among incident MI patients from 2002–2009 in the community-based Rochester Epidemiology Project. AF was defined using electronic health records. RESULTS: Of 1362 MI patients (mean age 68 ± 15, 57% men), 221 had prior AF, 134 developed early-onset AF, 96 developed late-onset AF, and 911 had no AF. Over a mean of 3.7 years, 3335 hospitalizations, 4940 ED visits, and 70,632 outpatient visits occurred. After adjustment, as compared to those without AF, patients with prior and early-onset AF exhibited a 1.5-fold and 1.3-fold increased risk of hospitalization, respectively. In contrast, late-onset AF carried a 2.1-fold increased risk of hospitalization. The corresponding hazard ratios for ED visits were 1.4, 1.2, and 1.7 for prior, early-onset, and late-onset AF, respectively. Surprisingly, the risk of outpatient visits did not differ by the timing of AF, and only a 1.3-fold increased risk was observed for late-onset AF. CONCLUSIONS: Among patients with MI, the risk of subsequent hospitalizations, ED visits and outpatient visits was markedly according to the timing of AF, with approximately twice the risk among those developing late-onset AF compared to MI patients without AF. AF is an adverse prognostic indicator in MI and these data underscore the importance of its management in MI patients.

PCV99 BRAZIL - PROFILE OF PATIENTS AND RESOURCE USE ASSOCIATED WITH TOTAL HIP OR KNEE REPLACEMENT SURGERY IN THE PUBLIC HEALTH CARE SYSTEM IN BRAZIL:
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OBJECTIVES: To evaluate the profile of patients undergoing hip replacement (THR) or knee replacement (TKR) surgery and the associated costs with surgery according to public health care system (SUS) perspective.

METHODS: A study period (2004-2008) was conducted for patients who underwent hip replacement (THR) or knee replacement (TKR) surgery between January 2009 to March 2011, with a minimum follow-up of 12 months postoperatively. Data on patient demographics and clinical characteristics, as well as resource use and costs associated to these procedures, were collected. Outcomes were expressed as costs per patient or per hospitalization for those who died (median: 779.0). Mean time to death was 747.0 ± 568.9 days from first hospitalization for those who died (median: 779.0). CONCLUSIONS: This large chart review provides a recent, real-world patient profile of HF-REF patients following hospitalization for HF in China. Heart failure treatment presents a large burden to the health care system in the 5 major regions in China, with some regional variations.

PCV100 ACUTE HEART FAILURE PATIENTS WITH AND WITHOUT RENAL IMPAIRMENT: A STUDY OF HEART FAILURE-RELATED RESOURCE UTILIZATION AND COSTS IN THE UNITED STATES
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OBJECTIVES: Acute heart failure (AHF) is a mounting problem worldwide, with significant economic burden. Renal impairment is common among patients with AHF but its full economic implications are unknown. The study aims to describe and compare healthcare resource utilization and costs among AHF patients with and without renal impairment. METHODS: Patients with ≥1 hospitalization with a primary diagnosis of AHF continuously enrolled for ≥6 months of baseline period prior to the first hospitalization (FH) were identified in the US MarketScan claims database (2004-2008). History of renal impairment was identified throughout codes at baseline or FH. Patients were observed for 12 months post FH or until insurance disenrollment. Measured outcomes include inpatient resource utilization, hospital length of stay (LOS) and costs. Rates of hospital re-admissions, outpatient visits and costs were calculated per patient per month (PPPM). RESULTS: A total of 6396 AHF patients (mean age 73.6 years, 50.6% female) were studied, 1082 (17%) had renal impairment. At FH, renal patients had more comorbidities, longer LOS (7.0 vs. 7.9 days), and similar costs ($15,820 vs. $15,467) compared to non-renal patients. The average cost per re-hospitalization was $17,887 vs. $16,780 for renal vs. non-renal patients with 7.0 vs. 6.5 days, respectively. Throughout the study period, re-hospitalization, outpatient visit rates and costs PPPM were significantly (P<0.05) higher among renal compared to non-renal patients, with highest costs and rates observed within 3 months of FH ($2,480 vs. $1,421 total healthcare costs PPPM) vs. 0.024 re-hospitalization PPPM vs. 1.051 outpatient visits PPPM). CONCLUSIONS: AHF patients with renal impairment are resource intensive and a costly subgroup of AHF population. Their increased use of outpatient services despite having longer, more frequent hospitalizations suggest an unmet need thus, new therapies that reduce re-hospitalizations may offer meaningful cost savings and improved health outcomes.

PCV101 HOSPITALIZATIONS AND PRIMARY CARE RESOURCE USE – A REAL-LIFE PERSPECTIVE
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OBJECTIVES: As the primary care sector does not bear the direct costs of hospitalization, it may under-invest in prevention to avoid hospitalizations. This could increase overall primary care spending if hospitalizations are associated with subsequent increases in primary care resource use. The objectives of this study were to compare the number of primary care visits one year before and after a hospitalization, within hospitalized patients, and between non-hospitalized and hospitalized patients (post hospitalization).

METHODS: Data on hospital and primary care resource use among hypertensive patients (>17 years) were extracted from electronic patient journals from 1999 through 2007. Differences in number of visits prior to and post hospitalization, and between hospitalized and non-hospitalized patients was assessed using standard statistical tests. Propensity-score matching was used to account for differences in observable characteristics. RESULTS: Among 10,196 patients, 4,692 patients were hospitalized and 5,504 were not hospitalized. During the year prior to hospitalization, hospitalized patients had a significantly lower (P<0.001) mean number (SD) of total visits than in the post-hospitalization year: 4.58 (7.75) versus 6.91 (12.12). Non-hospitalized patients had significantly fewer (P<0.0414) visits than hospitalized patients (post-hospitalization): 4.46 (4.28) versus 6.91 (12.12). Results were qualitatively similar for GP and nurse visits, in different subgroups (e.g. age, diabetes), and in patients without prior cardiovascular disease or cancer. Also when comparing propensity-matched (e.g. gender, geographic region) hospitalized and non-hospitalized patients, results remained similar. The number of visits demonstrated a rising trend prior to hospitalization and peaked during the hospitalization months and between non-hospitalized and hospitalized patients (post hospitalization).

CONCLUSIONS: We show that hospitalizations are associated with significant subsequent increases in primary care resource use. This suggests that investing in treatments that prevent hospitalizations could potentially reduce costs in primary care while improving patient health.

PCV102 CHRONIC HEART FAILURE PATIENTS IN THE ELDERLY: COSTS AND RESOURCE UTILIZATION FOLLOWING INITIAL HOSPITALIZATION
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OBJECTIVES: To determine resource utilization and costs associated with hospitalization among elderly patients with chronic heart failure (HF). METHODS: Patients 65 years and older, with ≥1 hospitalization with a chronic HF diagnosis (ICD-9 428.22, 428.32 or 428.42) were identified in the MarketScan database between 2004 and 2008. Patients were observed starting 6 months prior to index chronic HF hospitalization (IH) until disenrollment or end of data availability. Resource use and costs during IH and subsequent 4 HF re-hospitalizations were cal-