COST OF CONSUMABLES ASSOCIATED WITH CARDIOVASCULAR COMPUTED TOMOGRAPHY ANGIOGRAPHY: THE CARDIOLOGIST’S PERSPECTIVE
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OBJECTIVES: Computed tomography angiography (CTA) scanners have advanced patient care by providing cardiologists with the latest in imaging technology. When deciding to purchase a CTA scanner, practices must evaluate the economic feasibility of ownership in terms of both fixed (eg, equipment and facility costs) and variable costs (ie, consumables costs). The objective of this study was to provide cardioangiology practices with a comprehensive cost estimate for the cost of consumables incurred for CTA procedure. METHODS: Practice patterns from a large cardioangiology practice were evaluated for all CTA procedures over an eight-month timeframe. The various consumables utilized for CTA procedures were captured and classified into three main categories: contrast media, drugs, and medical supplies. The average utilization of each consumable was then evaluated, and the unit acquisition cost for each consumable was applied to quantify the average cost of consumables per CTA procedure. RESULTS: From January 2006 through August 2006, data from 3119 procedures were evaluated. The average cost of consumables per procedure incurred by the practice was $83.31. Of this cost, $32.55 was incurred for contrast medium. Additionally, $9.91 was the average cost per procedure incurred for drugs such as beta blockers, solu-medrol, diphenhydramine, intravenous fluids, nitrolingual spray, and antiemetics. The largest component of consumables was medical supplies (eg, syringes, needles, tubing, cannulae, intravenous catheter, dressing/bandages, table paper, gloves, alcohol pads, etc), which cost the institution an average of $40.85 per procedure. CONCLUSION: When evaluating the economic feasibility of operating a CTA scanner, cardiology practices can expect to incur an average of $83.31 per procedure for consumables.

IMPACT OF NESIRITIDE ON TREATMENT OF ACUTE DECOMPENSATED HEART FAILURE (ADHF): EVIDENCE FROM A US HOSPITAL DATABASE
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OBJECTIVES: Compare impact of nesiritide (a recombinant natriuretic peptide approved for intravenous treatment of ADHF) administration within first day versus after first day on in-hospital outcomes using an inpatient claims database of 400+ US hospitals and 600,000+ discharges (PREMIER). METHODS: From 681,690 discharges during 2003 and 2004 in the PREMIER database, we studied patients with DRG 127 at discharge and ICD 9 codes for primary diagnosis of CHF: First day nesiritide (D1) was defined as nesiritide + diuretic administration within 1st day of hospital admission; post-first-day administration (post-D1) was defined as nesiritide administration after first hospital day with diuretic therapy during first day. Four outcomes variables were analyzed: discharge status, hospital and ICU LOS, and hospitalization cost. Propensity matching and propensity covariate adjustments were performed in all regression analyses to remove bias in between-group comparisons. RESULTS: In all, 8126 patient discharge episodes were identified as D1 and 793 as post-D1. The D1 group had reduced mortality odds versus post-D1 (0.46, 95% CI: 0.36, 0.59, P < 0.0001). Hospital and ICU LOS were shorter for D1 versus post-D1 (~4.5 days [95% CI: −4.9, −4.2, P < 0.0001] and ~1.7 days [95% CI: −2.1, −1.5, P < 0.0001], respectively). Hospital costs were lower for D1 patients (D1-Post D1): ~$6642 (95% CI: −$7226, −$6058, P < 0.0001). Adjusted and unadjusted analyses on all four outcomes were consistent and achieved statistical significance. CONCLUSION: This analysis demonstrated that in two groups of propensity-matched hospitalized patients, those treated with nesiritide within the first day of hospital admission have better outcomes than those treated with nesiritide later. These findings are based on retrospective data sources. A recently announced prospective randomized, controlled global clinical trial enrolling 7000+ patients (ASCEND-HF) will provide additional information.

THE EFFECT OF DRUG COST-SHARING ON ADHERENCE TO CHRONIC MEDICATIONS
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OBJECTIVES: To study the effects of two sequential changes in drug cost-sharing policies on adherence to statins and beta-blockers by seniors in British Columbia. METHODS: For each drug class, we identified a baseline cohort of subjects initiating therapy in the 6 months prior to January 1, 2001, a co-payment cohort initiating therapy in the 6 months prior to the co-payment policy introduced January 1, 2002, and a co-insurance cohort initiating therapy in the 6 months prior the co-insurance policy introduced May 1, 2003. We calculated the proportion of patients adherent in each cohort each month, with follow-up for each cohort beginning at the start of that cohort’s recruitment period and ending 15 months later. Patients were defined as adherent during a month if they had a proportion of days covered (PDC) of 80% or greater, calculated by dividing the number of days the patient had drug supply available by the number of cohort membership days the patient contributed in that calendar month. RESULTS: In the baseline cohort, which did not experience cost-sharing, 53.8% of statin initiators were adherent at their statins at month 15. The adherence level in the co-payment cohort at this time, 9 months after the introduction of the co-payment policy, was 50.5%. 50.8% of co-insurance cohort member were adherent. Adherence to beta-blockers was lower, with 48% of the baseline cohort initiators adherent at month 15. However, the introduction of the co-payment and co-insurance policies reduced this adherence level by only 1 percentage point. CONCLUSION: The introduction of the co-payment and co-insurance policies reduced adherence to statins by 5 percentage points relative to baseline levels, but had a much smaller effect on beta blocker adherence levels. Policy-