

prescription medical devices. This regressive effect is amplified by voluntary health insurance schemes.

PMD74

CLINICAL AND ECONOMIC OUTCOMES OF FIBRIN SEALANTS (EVICEL AND TISSEEL) USED FOR HEMOSTASIS IN CORONARY ARTERY BYPASS GRAFTING SURGERY IN THE UNITED STATES

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OBJECTIVES: This study compares clinical and economic outcomes associated with fibrin sealant use for hemostasis: Evicel vs. Tisseel among patients undergoing CABG surgery. **METHODS:** This is a retrospective database analysis using Premier Hospital Database from January 2009 to March 2014. Adult patients undergoing primary CABG surgery were selected with the surgery day as index day. Patients who received Evicel or Tisseel on the index day were included. Patients receiving both Evicel and Tisseel during the same hospitalization or on the same index day were excluded. Clinical outcomes included post-operative bleeding complications (ICD-9: 998.1) and blood transfusion on the index day. Economic outcomes included length of stay (LOS), hospital cost and 30-day re-admission. Propensity score matching was used to control for patient factors (e.g., disease severity and high-risk comorbidities) and hospital characteristics for outcomes comparisons. **RESULTS:** A total of 129, 014 patients underwent primary CABG surgery (index day). In 986 patients (mean age: 64 years, 73% male) Evicel was used on the index day and in 6,340 patients (65 years, 75% male) Tisseel was used. After propensity score matching for baseline characteristics and deploying generalized linear models to control for other hemostatic agent use, Evicel cohort had significantly lower post-operative bleeding complications (2.7% vs. 5.0%, $P < 0.001$), lower blood transfusion rate on the index day (17.1% vs. 35.3%, $P < 0.001$), lower readmission rate (17.6% vs. 31.9%, $P < 0.001$), and a lower cost (\$40512 [95% CI: \$39387 - \$41669] vs. \$46048 [\$44769 - \$47363]) compared to Tisseel. The LOS was similar (9.3±6.2 vs. 9.3±6.0 days) after matching. **CONCLUSIONS:** This real-world study found that receiving Evicel was associated with fewer bleeding complications and lower cost than receiving Tisseel. Due to the limitation of retrospective study, information on the application site and method is missing. Further research on the potential explanations and underlying influential factors is warranted.

PMD75

ECONOMIC OUTCOMES AMONG SURGICAL PROCEDURES USING SURGICEL™ IN MEXICAN PUBLIC HEALTH CARE INSTITUTIONS

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OBJECTIVES: Optimum hemostasis is critical to prevent surgical bleeding progression and the development of associated complications, which imply additional hospital resource utilization. Hemostats such as Surgicel™ Original (SO) have demonstrated to effectively prevent bleeding complications; with improved hemostatic action, newer Surgicel™ versions (Fibrillar & SNow, SF&S) could potentially yield economic benefits. This study aimed to estimate and compare healthcare costs associated with the use of SF&S vs. SO for selected surgical procedures under a Mexican public hospital perspective. **METHODS:** The study aimed to estimate and compare costs attributable to the use of SF&S and SO in carotid endarterectomy (CEA), brain/cerebral (BC), and cardiovascular (CV) procedures in a 3rd level public hospital in Mexico. Total cost components for each procedure were length of stay (LOS), intensive care unit (ICU) days, hemostatic units and blood transfusion units; no other bleeding-related complications were considered. Resource utilization data for each considered procedure were taken from a recently published retrospective analysis of comparable cohorts using the aforementioned Surgicel™ versions. LOS and ICU costs were taken from official public cost lists, SF&S and SO costs were set internally at market value, and blood transfusion costs were taken from published local evidence. Considered time horizon was less than one year, thus no annual discount rate for costs was used. Results are shown in percentage savings / additional cost per patient. **RESULTS:** Under the conservative approach considered, SF&S use yielded a 17.2% and 12.6% reduction in total costs vs. SO for BC & CV, respectively; for CEA, SF&S use resulted in 1.8% higher total costs. While new Surgicel™ versions are more costly, their faster times to hemostasis reduce additional LOS and ICU days, being the latter the most significant savings driver. **CONCLUSIONS:** Under provided conditions, the use of newer versions of Surgicel™ represents potential savings for public hospitals in Mexico.

PMD76

HEALTH ECONOMIC EVALUATION OF HYDROPHILIC COATED VERSUS NON-COATED URINARY CATHETERS FOR INTERMITTENT USE IN THE UNITED STATES

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OBJECTIVES: In the U.S., all intermittent urinary catheters with the same HCPCS code which are covered in an insurance plan are reimbursed at the same level, although the amount of reimbursement can differ from plan to plan. However, clinical evidence proposes efficacy differences between catheters. The objective of this study was to perform a health economic evaluation of hydrophilic coated compared to non-coated catheters in the U.S. setting. **METHODS:** A Markov model simulating a population of 40 years old users of intermittent catheterization was developed based on U.S. specific cost data from the literature. The simulated population was modelled to use either a hydrophilic coated or a non-coated catheter 4 times per day. Catheters within the HCPCS code A4351 and reimbursed with \$1.89 each (mean for Medicare) were compared. For non-coated catheters, an additional cost per catheter of \$0.13 for gel was added. Included catheter related complications were symptomatic urinary tract infections (UTIs; \$58/event), bacteremia (\$2800/event), epididymitis (\$311/event), strictures (\$7592/event) and bladder stones (\$2951/event). Absolute and relative risks for the complications were retrieved from the literature. Costs were discounted at 3% annually, and health effects were expressed as number

of complications avoided. **RESULTS:** From the age of 40 years to death, patients using hydrophilic coated catheters avoided on average per person 16 symptomatic UTIs, 0.6 events of bacteremia, 0.7 events of epididymitis and 0.7 events of strictures compared to patients using non-coated catheters. This translated into total savings of \$9,714 per patient over a lifetime horizon. The cost per hydrophilic catheter could be increased by 15% and still result in cost-savings. **CONCLUSIONS:** At the same reimbursement level, the hydrophilic coated catheter was found to result in both health benefits and substantial cost-savings compared to the non-coated catheter.

PMD77

SPECIALTY PHARMACY, DIAGNOSTIC, AND GENETIC TESTING COVERAGE IN HEALTH PLANS IN THE UNITED STATES: RESULTS FROM A SURVEY OF MEDICAL AND PHARMACY DIRECTORS

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OBJECTIVES: Specialty pharmacy (SP) products treat specific, complex chronic diseases and are costly require reimbursement and handling assistance/training, have unique/limited distribution processes; frequently have patient-adherence programs. In 2014 SPs accounted for 33% of spending (up from 2009=23%). Diagnostic/genetic tests identify/predict diseases and treatment response. Understand US health plans/insurers/PBMs management of SPs, diagnostic and genetic tests. **METHODS:** Online survey of Managed care (MC) medical and pharmacy directors from public/private-plans with multiple member-types on: advisor+plan information; specialty-pharmacies/pharmaceuticals, and genetic/diagnostic tests. **RESULTS:** MDs represented 54% of respondents. Plans were: 39.6%=Local; 35.4%=National; 25.0%=regional. 53.7% of plans restricted SP providers: the majority restricted services to a small set under contract (63.0%), 17.4% allow any SP; and 6.5% only restricted products available through multiple specialty pharmacies. Plans covered clinician administered products (CAPs, i.e., injections/infusions) under the medical-benefit (MB=67.3%); none exclusively under the pharmacy-benefit (PB=0%); 32.7% based on cost thresholds. Changes for CAPs: not expected (72.9% of plans), expected before 12/16 (18.8%) and 12/18 (2.1%). Oral Biologics (OBs) were managed under the PB 78.3%; the MB (10.9%); based on cost thresholds (10.9%). Expectations for OB benefits: no change (71.1% of plans), currently changing (11.1%); before 12/16 (13.3%) and 12/18 (4.4%). SP+OB copays vary by group/benefit design and are shifting from fixed to %-copays. SPs were a top current/future concern. In 2013, genetic tests (GTs) were covered in all cases (59.1% of plans); not covered (20.5%) and below threshold (20.5%) by 2015, GTs were expected to be covered in all cases (63.4%); not covered (9.8%); and threshold-based (26.8%). GT coverage was highest for oncology (92.9%); OB/GYN (83.3%); cardiovascular (50%). Disease marker tests were covered in all cases (86.7%), not covered (4.4%), and 8.9% threshold based. Coverage for therapy response tests: all cases (76.6%), no-cases (10.6%); and 12.8% threshold-based. **CONCLUSIONS:** Testing and specialty pharmacy/pharmaceutical expenditures are expected to grow and require appropriate coverage.

PMD78

COST-EFFECTIVENESS OF SAFETY ENGINEERED PERIPHERAL CATHETERS WITH AN INTEGRATED STABILIZATION PLATFORM UNDER THE PERSPECTIVE OF HOSPITALS IN BRAZIL

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OBJECTIVES: Securement adverse reactions and peripheral intravenous restarts occur frequently in hospitalized patients. The current evaluation aims at determining the cost-effectiveness of a safety engineered peripheral catheter with an integrated stabilization platform and a multi-access septum during its use in patients admitted to hospitals in Brazil. **METHODS:** A decision tree was elaborated for estimating the incremental cost-effectiveness ratio (ICER) in short time horizon (96 hours) between safety engineered peripheral catheters with stabilization platform (winged catheters) and without platform (non-winged catheters). **RESULTS:** Clinical data considered were venipuncture success (rate of 90.7% for winged versus 82.2% for non-winged catheters, $p=0,036$) and incidence of securement adverse reactions (16% with winged versus 47,6% with non-winged catheters, $p=0,001$). Outcomes were obtained from a systematic review of literature performed with international publications up to 31.08.2015. The total direct costs for adverse events' treatment was 76,70 Brazilian Reais per peripheral intravenous restart and 98,07 Brazilian Reais per securement adverse reactions treatment. Costs were estimated by expert opinion and pricing data collected from secondary databases. The ICER results reflect cost-savings of 138,31 Brazilian Reais per avoided complications and 558,33 Brazilian Reais per peripheral intravenous restarts avoided. **CONCLUSIONS:** Our study points out that safety engineered peripheral catheters with an integrated stabilization platform constitutes feasible alternatives for Brazilian hospitals. Its use can generate cost reductions and gains in effectiveness driven by reduction in adverse reactions related to inadvertent mobilization of peripheral access over time.

PMD79

HEALTH ECONOMIC IMPACT OF THE ADOPTION OF SHERLOCK 3CG® TIP CONFIRMATION SYSTEM FOR PERIPHERALLY INSERTED CENTRAL CATHETER PLACEMENT: A US HOSPITAL SYSTEMS PERSPECTIVE

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OBJECTIVES: The poster presentation purpose is to demonstrate the predicted clinical and economic impacts of bedside peripherally inserted central catheters when using real time navigation and tip confirmation with the Sherlock 3CG®Tip Confirmation System. **METHODS:** This health economic analysis is based on a model that can accommodate actual facility experience and hypothetical hospital system scenarios. Using this model, clinical and economic outcomes associated