hospital stay was higher in HOSP2 (11.3 vs. 14.5, p < 0.01). Significant differences were anyway confirmed only among non-infected patients. Our results were not confirmed with the bootstrap method. CONCLUSIONS: Cost of antibiotic therapy, its effects on the risk of infections and length of remission can be influenced by the therapeutic choices. Information on potential consequences is useful to implement optimal therapeutic approaches.

TOTAL INSURANCE COST OF TREATMENT OF HIP FRACTURES ACCORDING TO THE LOAD STABILITY OF DIFFERENT SURGICAL METHODS
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OBJECTIVES: The aim of this study was to calculate the health insurance cost of treatment of patients with peritrochanter fracture of femur from the first hospital admission for 18 months follow up period according to most frequently used 4 different surgical methods (ender nailing, fix angled plate, gamma nailing and dynamic hip screw fixation (DHS).

METHODS: Recruitment criteria were: 1) all patients with a hip fracture in 2000 defined by the International Classification of Disease (ICD) as “S7210”; 2) working age between 18–65; 3) first admission to surgical unit, and had an operation because of monotraumatic peritrochanteric fracture of femur; and 4) without comorbidities. The cost analysis includes the cost of acute and chronic in-patient care, outpatient care and sick pay.

RESULTS: The total number of patients having peritrochanteric fracture of the femur was 1154. Due to the inclusion criteria listed in the data and methods chapter altogether 186 patients were included into the study. The total costs were the highest in case of those types of operations with lower cost of prosthesis device and lower load stability: Ender nailing €2322, fix angled plate €2109 of the higher sick-pay costs. The total costs were the lowest in case of those types of operations with higher cost of prosthesis device and higher load stability (Gamma nailing €2022, dynamic hip screw €1836) because of the lower sick-pay costs. The average days spent on sickness-pay varied according to the types of surgical methods. Gamma nailing-182 days, DHS fixation-212 days, Ender nailing—310 days, fix angled plate—269 days.

CONCLUSION: In case of surgical methods with lower complication rate and quicker load stability (Gamma nailing, DHS fixation) the cost of primary treatment is higher but the total costs are lower because of lower additional costs (chronic care, sickness-pay).

DIFFERENCES IN BLOOD TRANSFUSION COSTS BY HIP AND KNEE REPLACEMENT AND REVISION SURGERY SUBTYPES
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OBJECTIVE: To analyze blood transfusion patterns and associated costs in hip/knee replacement and revision surgeries in the US inpatient setting.

METHODS: This study used Premier’s US Inpatient Comparative Database, containing approximately 5 million discharges annually, from over 500 hospitals. A total of 12,211 inpatient discharges with a primary procedure for hip (ICD-9 codes 81.51, 81.53; US projected total: 274,523 procedures) and 17,805 for knee arthroplasty (ICD-9 codes 81.54, 81.55; US projected total: 494,629 procedures) between July 2003 and June 2004 were evaluated. Blood management patterns were examined pre- and post-surgery. The association between surgery subtypes and transfusion costs were examined using multivariate regression after controlling for various patient-(age, race, gender, severity), hospital-(location, teaching status, bedsize, region), and clinical-factors, inpatient mortality, payer type (Medicare, Medicaid, commercial/managed care), and physician specialty.

RESULTS: Average (maximum) blood transfusion costs of $448 ($11,838), $720 ($27,957), $321 ($17,328), and $427 ($5182) were incurred for total hip replacement, hip revision, knee replacement, and knee revision, respectively. Multivariate analyses showed that hip and knee revision costs were $272 and $66 higher than hip replacement, respectively (p < 0.0001). Being operated on by an orthopedic surgeon was associated with slightly lower total transfusion costs (p < 0.0001). Blood transfusion costs increased with increasing patient severity ($967), hospital bedsize ($100–$142), and urban/teaching status (p < 0.0001). Use of volume expanders and erythropoietic agents significantly increased blood transfusion costs by $184 and $294, respectively (p < 0.0001). Being male, discharged to home, and the use of topical sealants, were associated with lower total transfusion costs.

CONCLUSIONS: This study demonstrates that the anatomical location, surgical approach, physician specialty, and hospital characteristics are all associated with blood transfusion costs. Newer technologies/medications may reduce blood transfusion use/costs, and this potential for reduction may be even greater in certain subgroups.

DIFFERENCES IN BLOOD TRANSFUSION COSTS BY HIP AND KNEE REPLACEMENT AND REVISION SURGERY SUBTYPES

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FACTORS ASSOCIATED WITH BLOOD TRANSFUSION COSTS DURING AND FOLLOWING SPINAL SURGERY IN THE UNITED STATES
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OBJECTIVE: The purpose of this study was to analyze blood transfusion patterns and associated costs by various spinal surgery subtypes in the US inpatient setting.

METHODS: This study used Premier’s US Inpatient Comparative Database, containing approximately 5 million admissions annually, from over 500 hospitals. A total of 31,808 inpatient discharges with primary procedure codes for spinal fusion surgery (ICD-9 codes 81.01–81.08, 81.31–81.38, 81.61; US projected total: 274,523) between July 2003 and June 2004 were selected and stratified into seven surgical subtypes based on the anatomic location of fused vertebrae and surgical technique. Blood management patterns were examined pre- and post-surgery. The association between surgical spine subtypes and blood transfusion costs were examined using multivariate regression after controlling for various patient-(age, race, gender, severity), hospital-(location, teaching status, bedsize, region), and clinical-factors, inpatient mortality, payer type (Medicare, Medicaid, commercial/managed care), and physician specialty.

RESULTS: Spinal fusion surgeries incurred average (maximum) blood transfusion costs of $149–$493 ($3,300–$13,120) per surgery, depending on subtype. As compared to cervical fusions, dorsal/dorsolumbar and lumbar/lumbosacral fusions as well as refusions were associated with significantly higher blood transfusion costs ($100–$195; p < 0.0001). Being operated by a neurosurgeon was associated with lower blood transfusion costs (p < 0.0001). Blood transfusion costs increased with increasing patient severity ($967), hospital bedsize ($100–$142), and urban/teaching status (p < 0.0001). Use of volume expanders and erythropoietic agents significantly increased blood transfusion costs by $184 and $294, respectively (p < 0.0001). Being male, discharged to home, and the use of topical sealants, were associated with lower total transfusion costs.

CONCLUSIONS: This study demonstrates that the anatomical location, surgical approach, physician specialty, and hospital characteristics are all associated with blood transfusion costs. Newer technologies/medications may reduce blood transfusion use/costs, and this potential for reduction may be even greater in certain subgroups.