HIT ELISA (optical density plus high clinical probability for HIT, or 3) strongly positive (ELISA). Confirmed HIT was defined by one of the following: 1) performance of a HIT enzyme-linked immunosorbent assay expected HIT during 2005. Suspected HIT was defined by the conducted on a population of consecutive patients with suspected HIT, and confirmed HIT, and 12 with confirmed HIT. Patients with confirmed HIT incurred substantially greater average costs ($25,696, range $357–$145,217) than those with confirmed HIT ($3846, range $38–$14,258). The average cost of a negative HIT case was $115 (range $38–$4119). CONCLUSION: This is the first study to identify the costs associated with confirmed HIT, confirmed HIT, and negative HIT. Suspected HIT increases the costs of hospital care.

THE DIRECT MEDICAL COSTS ASSOCIATED WITH SUSPECTED (CONFIRMED AND NEGATIVE) HEPARIN-INDUCED THROMBOCYTOPENIA Nanwa N1, Mittmann N2, Knowles S3, Selby R1, Shear N1, Bucci C2, Walker S1, Geerts W1

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OBJECTIVE: Heparin-induced thrombocytopenia (HIT) is an important adverse reaction associated with heparin utilization. No previous studies have assessed the cost of suspected HIT or examined HIT from a Canadian perspective. Therefore, the objective of our study was to quantify the direct medical costs associated with suspected and confirmed HIT from a Canadian hospital perspective. METHODS: A cost of illness analysis was conducted on a population of consecutive patients with suspected HIT during 2005. Suspected HIT was defined by the performance of a HIT enzyme-linked immunosorbent assay (ELISA). Confirmed HIT was defined by the performance of a HIT ELISA or SRA result. Resource utilization variables included: 1) HIT-safe anticoagulant use, 2) laboratory tests, 3) diagnostic and surgical procedures, and 4) length of stay (LOS) attributed to HIT. The average cost (2007 CAN$) per case of confirmed HIT, confirmed HIT with thrombosis (HITT), and negative HIT was calculated. Cost data was obtained from hospital and provincial sources. RESULTS: There were 110 suspected HIT cases (56 males; 54 females) in 2005. Two patients were excluded because their HIT status could not be determined. Average LOS was 36 ± 42 (range 3–244) days. There were 88 negative HIT cases, 8 with confirmed HIT, and 12 with confirmed HITT. Patients with confirmed HITT incurred substantially greater average costs ($25,696, range $357–$145,217) than those with confirmed HIT ($3846, range $38–$14,258). The average cost of a negative HIT case was $115 (range $38–$4119). CONCLUSION: This is the first study to identify the costs associated with confirmed HIT, confirmed HITT, and negative HIT. Suspected HIT increases the costs of hospital care.

BURDEN OF OBESITY: 10-YEAR REVIEW OF PUBLISHED LITERATURE ON DIRECT AND INDIRECT COSTS IN NINE COUNTRIES Barrett AM1, Colosia A1, Boye KS2, Oyelowo O2

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OBJECTIVE: To examine literature published during the past ten years describing the impact of obesity and obesity-related disease on direct and indirect costs in Australia, Canada, France, Germany, Italy, Spain, Sweden, the UK, and the US. METHODS: A review of the medical literature published from 1997 to 2007 was conducted, including MEDLINE, EMBASE, Current Contents Connect, and International Pharmaceutical Abstracts databases; ISPOR abstracts; and data published by relevant governmental agencies. RESULTS: A substantial portion of direct costs related to obesity derive from treating comorbidities associated with the condition (e.g., type 2 diabetes, cardiovascular disease). Indirect costs, including those associated with reduced work productivity, increased absenteeism, and premature death, are significant, with the majority arising from comorbid conditions. Direct costs were greater for obese patients than for normal-weight patients; morbid obesity was associated with dramatic cost increases. Estimates of direct costs as a percentage of national health care expenditures were 5.7% for the US, and ranged from 2% to 2.6% for Australia, Canada, Sweden, and the UK. No estimates of indirect costs as a percentage of national health care costs were identified. No studies involving direct or indirect cost data collected since 1995 were identified for France, Italy, or Spain. CONCLUSION: Obesity has a substantial economic impact because of its high prevalence, association with multiple chronic diseases, and increased levels of disability and absenteeism. The lack of recent direct or indirect cost estimates in several countries highlights the need for further work to describe the global economic burden of obesity.

A SYSTEMATIC REVIEW OF LOW BACK PAIN COST OF ILLNESS STUDIES IN THE UNITED STATES AND INTERNATIONALLY Dagensais S1, Caro JJ2, Haldeman S3

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OBJECTIVE: Conduct a systematic review of low back pain cost of illness studies. METHODS: Medline was searched to uncover studies about the direct or indirect costs of low back pain published in English from 1997 to 2007. Data extracted for each eligible study included study design, population, definition of low back pain, methodology for estimating costs, year of data, and estimates of direct, indirect, or total costs. RESULTS: The search yielded 147 studies; 27 were deemed relevant. The studies reported on data from Australia, Belgium, Japan, Korea, The Netherlands, Sweden, the UK, and the US. Nine studies estimated direct costs only, 9 indirect costs only, and 9 both direct and indirect costs, from a societal (n = 18) or private insurer (n = 9) perspective. Methodology used to derive both direct and indirect cost estimates differed markedly among the studies. Among