PIH4

DRUG COSTS AT THE END OF LIFE

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OBJECTIVES: In a context of ageing populations and rising health care costs, it is important to explore health care costs at the end of life. The aim of this study is to quantify drug costs of patients who died at the University Hospitals Leuven in Belgium in 2006. **METHODS:** This retrospective, cross-sectional cost analysis measured drug costs related to the hospital stay during which patients died at University Hospitals Leuven in 2006. Drugs were classified at level 1 of the Anatomical Therapeutic Chemical (ATC) classification system. Drug resource utilisation was valued at unit costs pertaining to University Hospitals Leuven. The price year was 2007. Associations between drug costs and patient characteristics were investigated using the Mann-Whitney U-test. **RESULTS:** In total, 1462 patients died during their hospital stay at University Hospitals Leuven in 2006. Total drug costs related to their final hospital stay amounted to 2,970,457€. Median costs per patient were 576€ (0€–48,236€). There was no association between drug costs per patient and gender ($p = 0.063$). Median costs per patient were higher for patients aged under 68 years (837€) than for patients aged over 68 years (470€) ($p < 0.001$). Total drug costs were made up of blood and blood organs (ATC level B, 33% of costs), anti-infectives for systemic use (ATC level J, 31% of costs), nervous system drugs (ATC level N, 7% of costs), systemic hormonal preparations (ATC level H, 3% of costs), cardiovascular drugs (ATC level C, 2% of costs), and various other drugs (24% of costs). The 15 patients with the most expensive hospital stays generated 16% of total drug costs. **CONCLUSION:** Drug costs related to the hospital stay during which patients died were substantial. Drug resource utilization primarily related to blood and blood organs, and anti-infectives for systemic use.

PIH5

COSTS AND OUTCOMES ASSOCIATED WITH USE OF RECOMBINANT FOLLICLE STIMULATING HORMONE (RFSH) DURING IN VITRO FERTILISATION (IVF) TREATMENT IN A UNITED KINGDOM CENTRE

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OBJECTIVES: Published cost effectiveness analyses of IVF are generally based on clinical trial data, although costs and outcomes may not be representative of usual practice. This analysis evaluated the costs and outcomes of rFSH use in usual practice in the UK. **METHODS:** Subjects were randomly selected from all women undergoing IVF or Intracytoplasmic Sperm Injection (ICSI) treatment between 2001–2007 at a single centre serving NHS and private patients in England. Women were treated with rFSH (Puregon, Organon) for ovarian stimulation, predominantly as part of an antagonist protocol. Per cycle rates of clinical and ongoing pregnancy and live birth were calculated. The costs of rFSH were calculated from pharmacy dispensing data at 2007 UK prices. **RESULTS:** Four hundred, nineteen women were included, reporting 601 treatment cycles. Mean age was 36.3 years (range 21–49). The causes of infertility were: male factor (43%); female factor (38%); unexplained or other (19%). The clinical pregnancy rate was 35.9% (95% CI 32.2–40.0%), ongoing pregnancy rate 25.0% (21.5–28.4%) and live birth rate 20.8% (17.7–24.1%). Mean duration of ovarian stimulation was 9.4 days (9.3–9.6 days). The mean per cycle rFSH dose prescribed was 1816 units (1775–1863) and dispensed was 1960 units (1897–2012). Mean cost of rFSH per cycle was ≤661 (≤640–≤679). **CONCLUSION:** UK guidelines assume the average per cycle FSH dose is 1750–2625, cost of drugs is ≤1000 and total cost of the cycle is ≤2771. By substituting FSH use derived from clinical practice, the cost per cycle could be reduced by 12%. Further research will extend this work to other centres and settings.

PIH6

INPATIENT COSTS AND OUTCOMES ASSOCIATED WITH TRAUMATIC INJURY AMONG PEDIATRICS IN THE UNITED STATES

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OBJECTIVES: To generate national estimates of inpatient costs, length of stay (LOS), and probability of death among US pediatric (≤17 years) hospitalizations for blunt or penetrating trauma, stratified by injury severity and trauma center designation of the admitting facility. **METHODS:** Discharge data from the 2002 HCUP Nationwide Inpatient Sample were analyzed for 55,561 pediatric hospital admissions (unweighted n = 11,566) for blunt or penetrating trauma. An injury severity score (ISS) was calculated for each admission using the ICDMAP90 software; 4 mutually exclusive categories corresponding to increasing severity were identified. Data on admitting facilities' trauma center designation were obtained from the American Hospital Association. Stays for patients admitted from or transferred to another inpatient facility were excluded. Weighted estimates of costs, LOS, and probability of death were calculated for each stay. **RESULTS:** Most admissions (57.5%) were for low severity injuries (ISS = 0–9); critical injuries (ISS = 25+) represented 8.5% of admissions. Nearly half (44.9%) of all admissions were to non-trauma centers; Level I, II, and III/IV trauma centers represented 29.9%, 19.5%, and 4.3% of admissions, respectively. Overall, inpatient costs increased substantially with injury severity, ranging from $7,803 for low severity admissions to $34,135 for critical admissions. LOS and probability of death also increased from low to critical injury severity (3.0 to 10.7 days, 0.5% to 23.9%, respectively). Costs, LOS, and probability of death decreased from Level I to III/IV trauma centers ($14,745 to $9,170, 5.1 to 3.6 days, 3.3% to 2.9%, respectively); for non-trauma centers, these outcomes were $12,267, 4.6 days, and 2.6%, respectively. **CONCLUSION:** This is one of few studies to quantify differences in inpatient costs and outcomes for traumatic injury among pediatric patients across levels of injury severity and trauma center designation, in a multi-payer US population. Substantial variation was observed for all outcomes evaluated. These results may help decision makers allocate resources appropriately.

PIH7

COST-EFFECTIVENESS OF MAGNETIC RESONANCE IMAGE-GUIDED FOCUSED ULTRASOUND (MRGFUS) FOR THE TREATMENT OF UTERINE FIBROIDS

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OBJECTIVES: To evaluate the cost-effectiveness of Magnetic Resonance Image-Guided Focused Ultrasound (MRgFUS) compared to alternative treatment options for uterine fibroids from a