RESPONSE BIAS AMONG LIKELY CLINICAL TRIAL PARTICIPANTS

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OBJECTIVE: To understand the demographic, attitudinal, behavioral, and clinical characteristics of people who are likely to participate in clinical trials. METHODS: Analyses were based on a 12-page questionnaire mailed to U.S. adults in 2000. A total of 21,986 responses were received. Respondents were nationally representative based on gender, age, race, and geographic region; results were subsequently weighted and projected to the U.S. population. Participants were asked if they had ever participated in a clinical trial and whether they would ever consider participating in one. RESULTS: Among those who never participated in a clinical trial, 33% said they would strongly consider participating in one. For example, those who would participate were more likely to be female (55% v. 49%), younger (43 v. 47 years), and white (77% v. 70%). Behaviorally, likely participants were more likely to drink alcohol (64% v. 55%), smoke (27% v. 22%), visit physicians (4.0 v. 3.6 visits in six months), and use the internet for health care information (13% v. 6%). Attitudinally, those willing to participate were more likely to harbor alternative health care attitudes (e.g., “would try acupuncture” 38% v. 17%) and less likely to be satisfied with their current medical care (39% v. 47%). Clinically, they were more likely to be diagnosed with a range of comorbid medical conditions such as depression (15% v. 6%), migraines (16% v. 8%), and nasal allergies (32% v. 21%). CONCLUSION: People who are likely to participate in clinical trials look, think, and behave differently than those who are not likely to participate. Trial design and analysis should consider these differences and their possible impact on clinical, economic, and humanistic outcomes.

CAN UNIT COSTS BE COMPARED ACROSS WESTERN EUROPEAN COUNTRIES?

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OBJECTIVE: It is well documented that resource consumption and costs vary across settings. Unit costs can also vary. Using consistent cost-finding methods across and within five Western European (WE) countries unit costs of cardiovascular procedures were compared to examine the degree and impact of variation. METHODS: Unit cost data were collected from fee schedules, national averages and selected individual institutions. A bottom-up costing approach was used in hospitals based upon a definition of resources consumed for procedures. Hospital daily rates were calculated from an allocation of overhead accounts and a basic package of services such as nursing, housekeeping, dietary and pharmacy services. Costs were obtained in the local currency and converted directly to Euros. RESULTS: Unit cost variation was observed within and across countries. UK costs for percutaneous transluminal coronary angioplasty (PTCA) in 13 centers ranged between 1380 and 2700 Euros, 0.75–1.5 times the median. Inter-country cost variation for the same procedure ranged between 1850–4000 Euros, 0.60–1.3 times the median. Daily hospital general ward rates vary inter-country between 0.8 and 1.6 times the median, comparable to within country variation. Physician ambulatory visit costs from fee schedules that may not reflect actual costs were standard within country but varied across countries (0.5–1.2 times the median of 18 Euros). When applied to a consistent set of resources, differences in costs resulted in widely varying cost-effectiveness (CE) ratios by country. CONCLUSIONS: Obtaining comparable unit costs within countries is difficult. Center-specific costing is most reliable, but expensive and must be representative for submissions to national level health authorities. With standardized costing methods, the differences observed here cannot be explained by differences in accounting. Extreme care must be taken when transferring the results of CE analyses between centers, especially between countries.

MEDICAL DEVICE & DIAGNOSTICS

COST-EFFECTIVENESS OF AIRLINE DEFIBRILLATORS: IS PEACE OF MIND MORE IMPORTANT THAN SAVING LIVES?

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OBJECTIVES: Airline passengers are particularly vulnerable to the effects of cardiac arrest due to a lack of access to emergency medical services. To offset this isolation, airlines are installing automated external defibrillators (AEDs) on aircraft. Our objective was to measure the cost-effectiveness of airline AED programs and estimate their value to the flying public. METHODS: A decision analytic model was constructed to estimate the clinical and economic effects of airline AEDs. Inputs were obtained from published data and the FAA. Utility estimates were derived from cardiac arrest survivors. Sensitivity analyses evaluated changes in AED cost and probability of cardiac arrest. Since AEDs may provide utility gains through “peace of mind” for passengers not experiencing a medical event, the impact of this added passenger confidence was also evaluated. RESULTS: AEDs on commercial aircraft cost an incremental $5.16 per flight. AED deployment resulted in an estimated ad-