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ABSTRACTS VOLUME

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T-529

COST STUDY BY INFORMED TEST OF SOME PROFILES IN HORMONES UNIT OF BIOCHEMISTRY LABORATORY

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INTRODUCTION: The aim of our project was to calculate the cost of every informed tests requested in the last year 2002. MATERIAL AND METHODS: We accounted patient samples and other determinations implied in quality processes: calibrations, controls, repetitions and dilutions, which were imputed to economic repercussion in total cost by informed test. We evaluated Ratio Dp/Pi = Number of Tried Determinations (Dp) by every Informed Test (Pi). Determinations were made in Eleccsys 2010. Determinations calculation was obtained by autoanalyzer's book-keepers or manual registers. Number of informed tests by Laboratory Information System (Omega 2000). Data management by Excel 97. RESULT: Informed total tests: 110761 (5.08% of workload total to the Programmed Biochemistry Laboratory). Total tests in Eleccsys 2010 supposed 75% of workload of the Hormones Unit. THYROID PROFILE (TSH, FT4, FT3) supposed 67.57% of its workload. Dp/Pi = 1.32. Cpi = 2.07 €. Cpiq = 2.62 €. Cq = 7.65% of total cost tests in this equipment. FERTILITY PROFILE (FSH, LH, PRL) represented 12.88% of workload. Dp/Pi = 1.47. Cpi = 2.90 €. Cpiq = 3.79 €. Cq = 23.20%. TUMOUR MARKERS (PSA, FPSA, Ca125, AFP, CEA) generated 19.55% of workload. Dp/Pi = 1.63. Cpi = 4.50 €. Cpiq = 5.93 €. Cq = 19%. CONCLUSIONS: Average rate was 1.5. Average cost by informed test (Cpi) = 3.57 €. Cost Test informed + Quality (Cpiq) = 4.44 €. Quality Cost (Cq) was 14.2% of total cost in this equipment.

T-530

SCORING SYSTEM TO EVALUATE ANALYTICAL PERFORMANCE OF LABORATORIES PARTICIPATING IN AN EQA SCHEME FOR HORMONES

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To allow laboratories an easy evaluation of their own analytical performance, a new scoring system has been adopted in the External Quality Assessment (EQA) scheme for hormones (Immunocheck EQA; 1300 participants in Italy and in France; 18 control samples/year; 16 analytes). The score is assigned both to the result of a single assay (assay score) and cumulatively to all results of samples assayed in a control cycle (cycle score). Assay score. Each result is scored according to its deviation from target value expressed in SD units (Z-value). In detail the scores are: 4 (excellent) if Z <0.5, 3 (good) if 0.5<Z<1, 2 (sufficient) if 1<Z<2, 1 (inadequate) if 2<Z<3, -2 (unacceptable) if Z >3. Z-value is computed as ratio of percent deviation from target and "state-of-the-art" imprecision. Method mean is assumed as target; "state-of-the-art" imprecision is computed as mean CV of the methods most used in the survey (within-method, between-laboratories imprecision). Cycle score. The sum of scores assigned to all samples assayed in a control cycle, normalised by the maximum achievable total score and expressed as tenth, describes the analytical performance of the laboratory. As an example, cycle score for fT4 assay was found better than 6/10 for 82% of participants, between 3/10 and 6/10 for 14% and worse than 3/10 for the remaining 4%.

T-531

MONITORING OF CUSTOMERS COMPLAINTS IN THE INSTITUTE OF MEDICAL BIOCHEMISTRY CLINICAL CENTER OF SERBIA

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Institute of Medical Biochemistry of Clinical Center of Serbia is the first accredited medical laboratory in our country on the base of ISO 17025 Standard. The new document ISO 15189, more conveniert for medical laboratories is not applied because is not accepted in our country. In respect of applied ISO 17025 Standard it is very important to measure the customer satisfaction and complaints. Customer complaints are common indicator for grade given to different quality requirements and can be folow up from dissatisfaction to satisfaction. There are three groups of quality requirements: customer dissatisfaction - customer opinion of the degree to which a transaction has failed to meet the customers needs and satisfaction; customer satisfaction - customer opinion of the degree to which a transaction has met the customers needs and expectations; customer delight - customers opinion for characteristics of process which are not be expected but are positive. On the basis of the registered customers complains and satisfaction the Institute management regularly making plan for improvement of the laboratory service.

T-532

TURNAROUND TIME MODIFICATION AT AN EMERGENCY LABORATORY

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INTRODUCTION The turnaround time evaluation at an emergency laboratory is an important quality indicator of its working. For the last three years, several changes related to biochemical analysers have been produced: two HITACHI 911 were replaced by two Cobas Integra 400 in March 2000 and replaced again by two Olympus AU400 in MARCH 2002. The aim of this study is to know the effects of these changes on the turnaround time. MATERIAL AND METHODS We calculated the turnaround time in June 1999 for the HITACHI 911, in June 2000 for the Cobas Integra 400 and in June 2002 for the Olympus AU400. We selected those requests with biochemical parameters alone. Results were processed in the statistical program SPSS 9.0 and statistically compared using the Kruskal-Wallis and the Mann-Whitney tests. RESULTS Results were the following: Olympus AU400: N=543; Response time median=40 minutes. Standard deviation=20.38 Cobas Integra 400: N=434; Response time median=31 minutes. Standard deviation=19.79 HITACHI 911: N=430; Response time median=37 minutes. Standard deviation=16.89 The difference between the groups was found to be significant. CONCLUSIONS As we observe from the statistical data, the turnaround time of Cobas Integra is shorter than those from the other analysers. We must notice that we had an analytical demand increase in 2002 in relation to the same period of the other two years studied that can partially explain the longer turnaround time in the last period.