

## **OP01.2**

### **Use and costs of laboratory tests in primary health care in the Vantaa City, in Finland**

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**Background & Aim:** The costs for laboratory tests and imaging have increased three-fold during 1995–2011, while at the same time the total health care cost has increased two-fold. Great regional variation in the use of laboratory tests in primary health care have also been detected. The objective of this study is to describe the presence, extent and trends of variations in the use and costs of laboratory tests.

**Methods:** This retrospective study is based on the laboratory test data of the health center of Vantaa City. The city is the 4th largest county in Finland with a population of 215 000 being served by a hundred doctors in the local health centers. Changes in the use of tests in 2010, 2013 and 2015 are analyzed. The focus is on those tests that cause the highest costs.

**Results:** Between 2010 and 2013 the costs of laboratory tests increased 12 %. The highest annual laboratory cost per physician was 46000 euros, while the sum for the physician ranking at the 25th place for laboratory cost usage, was only half of this. The six common tests with the highest cost were ECG, blood cell counts, INR, tests for STDs, urine bacterial test and thyroid function test. These tests constituted for 24% of the laboratory costs. Ordering of these six common lab-tests varied greatly among physicians.

**Conclusions:** There is a great deal of variation among how primary health care physicians order laboratory tests. This possibly reflects variations in clinical practice. Detailed feedback and education on the rational use of laboratory tests may decrease this variation. Further, savings could be achieved with more optimized test utilization. In the presentation, the trends of laboratory use, costs and variations among doctors in 2010–2015 will be presented.