

HIV testing in Estonia 2012–2015. Analysis of the Estonian Health Insurance Fund's data.

EXECUTIVE SUMMARY OF THE REPORT

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Objective

The aim of this study was to evaluate the compliance of HIV testing with the national guidelines (are patients who should be tested tested) and the practices of HIV testing (who and where is tested for HIV) during 1.01.2012–31.12.2015.

Material and Methods

The data were collected from the database of treatment invoices of the Estonian Health Insurance Fund. In order to evaluate implementation of Estonian HIV testing guidelines, cumulative data (by gender and 5-year age groups) was collected about people who had received inpatient or outpatient health care services at least once during the study period. We analysed the proportion of people who had an HIV test marked on at least one of their treatment invoices. Additionally, we analysed how large proportion of people with HIV indicator conditions were tested for HIV. In order to evaluate the practices of HIV testing, all treatment invoices from the study period that included an HIV test were analysed on the basis of the patients' gender, age, living area, speciality of the practitioner who issued the invoice, type of service, type of treatment, and diagnosis. The diagnoses on treatment invoices were, on the basis of ICD-10, categorized as HIV indicator conditions as recommended by the Copenhagen HIV programme.

Results

Compliance with HIV testing guidelines

In the 4-year period, less than a tenth (4–7%) of men and less than a fifth (12–18%) of women, **aged 15–49 years**, who received health care services in **Harju and Viru County** were tested for HIV. There were no significant changes in the percentage of people tested over the years. In both counties, more **men** were tested in inpatient care than in outpatient care. However, **women** were tested more in outpatient care (related to testing during pregnancy) than in inpatient care. In family medicine, merely 1% of men and women receiving health care services were tested in both counties. Mean annual number of HIV tests per person was 1.1 among men and 1.3 among women.

HIV testing in the presence of an HIV indicator condition

This was monitored among patients aged 15–49 years receiving specialised medical care (both inpatient and outpatient) or family physician care across Estonia. Among the indicator conditions analysed, the highest proportion of people tested was among those with infectious mononucleosis (22–36% of patients) and viral hepatitis (24–31%), the lowest proportion of people among those with herpes zoster (3–7%) and pneumonia (3–8%). Some gender differences occurred as well – e.g. in the case of sexually transmitted infections, women are tested somewhat less than men (9–13% and 18–21%, respectively).

HIV testing practices

The analysis was not based on persons but on treatment invoices. Therefore, it is not known how many people were tested for HIV in terms of these treatment invoices. During the study period, HIV test was included in 265,324 treatment invoices. Only one fifth (21%) of the treatment invoices (= HIV tests) were health care services provided to men. Of all the treatment invoices that included HIV testing, one tenth (11%) included some HIV indicator condition. For half of the treatment invoices (50%) the recipient of the health care services was a person aged 15–49 years and living in Harju County or Ida-Viru County at the time of receiving the services. If we add those people who were not living in Harju/Ida-Viru County, nor were aged 15–49 years, but whose treatment invoices included some HIV indicator condition, then 56% of treatment invoices included a clear indication for HIV testing based on Estonian guidelines. 68% of family medicine invoices included a clear indication for testing. Treatment invoices do not reflect risk behaviour, which is why the percentage of tests with indication was likely to be even higher. 111,389 treatment invoices with HIV test were related to obstetrics care (42% of all treatment invoices with HIV test). During the same period (2012–2015) 65 new HIV cases were diagnosed among pregnant women (5% of all new HIV cases during this period). The estimated positivity rate per test was thereby 0.06% (among pregnant women).

Conclusions and Recommendations

The results of the study indicate that patients with HIV indicator conditions are tested too little. Testing rate among 15–49-year-olds in Harju County and Ida-Viru County is also very low. Therefore, it is important to follow Estonian HIV testing guidelines. The number of women tested is significantly higher than the number of men, even though the percentage of new HIV cases among women is lower than among men. Therefore, more emphasis should be put on testing men. Generally, a large number of young women is tested (primarily due to pregnancies), among whom HIV prevalence rate is low. Giving up the second HIV test during pregnancy should be considered. In family medicine, barely 1% of men and women receiving health care services were tested in Harju and Ida-Viru County. Testing in primary care should be significantly scaled up, as this is the setting where people are most likely to receive health care services.

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