Maastricht University

Faculty of Psychology and Neuroscience

# Do cross-border differences in HIV-testing determine the first pillar of the care continuum?

## *Data from a EuRegional setting bridging Belgium, Germany, and The Netherlands*

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## OBJECTIVE

**To explore between-country differences in HIV-indicators in the EuRegion Meuse-Rhine (EMR) using two complementary data-driven approaches**

## BACKGROUND

- **Nederland naar 0**! The Netherlands committed to targeted regional approaches to reach zero new infections
- **Regional approaches require appropriate interventions** targeted to the region's key populations and context to be successful.
- **EuRegio is a unique context** where several countries are in close proximity and HIV-risk is determined by both within-country and between-country differences.

## METHODS

- **Estimating Euregio-specific HIV care continuum:** using routinely-collected surveillance data of 2020 from the German Robert Koch Institute, Belgian Sciensano, and the Dutch HIV Monitoring Foundation (**Figure 2**).
- **HIV-testing differences among MSM**: using data from the cross-sectional EMIS survey from 2017, including 2,669 men who have sex with men (MSM). We employed multilevel multinomial regression modelling to identify sociodemographic factors associated with recent (<1 year), non-recent (≥1 year) or never-testing for HIV, while adding a random effect to explore differences between EMR-countries by estimating the intra-class correlation coefficient (ICC) (**Table 1 and 2**).

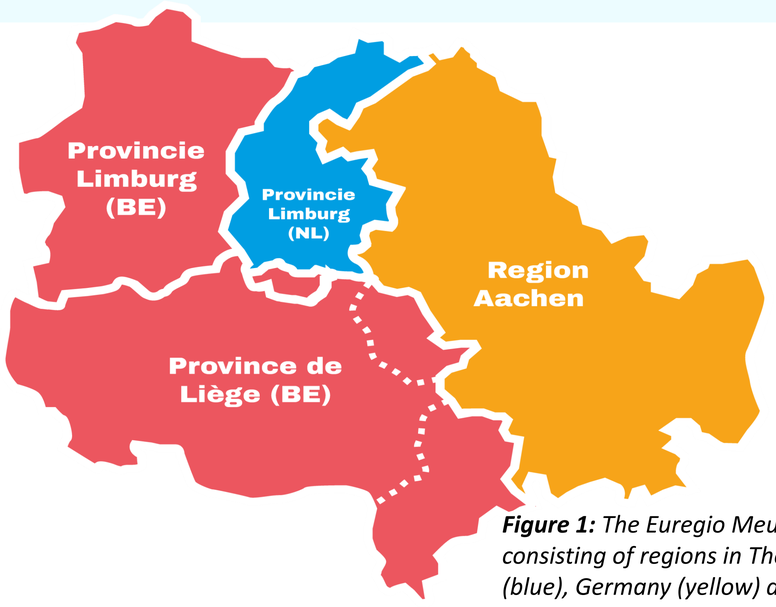


***Figure 1:*** *The Euregio Meuse Rhine consisting of regions in The Netherlands (blue), Germany (yellow) and Belgium (red)*

## CONCLUSION

- Results show **between-country differences** in HIV-testing leading to differences in HIV-risk.
- Non-recent testing and never-testing were also associated with a number of **socio-demographics** suggesting that some key populations (e.g. with transgender identity) and **lack of resources** (e.g. living outside the larger cities and financially struggling) significantly determine differences in HIV-testing.
- To reach zero new infections, targeted approaches to address these regional and sociodemographic differences are urgently needed.

## RESULTS

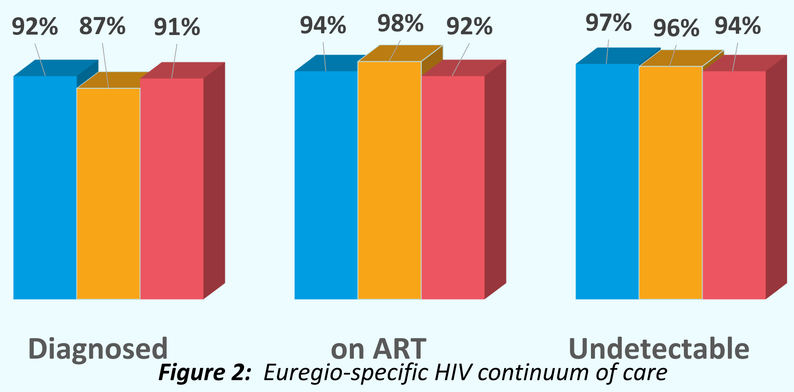


***Figure 2:*** *Euregio-specific HIV continuum of care*

| *Table 1. Multinomial regression modelling of socio-demographics.* | Recently tested N=1,335 (50%) | Not-recently tested N=693 (26%) | Never tested N=641 (24%) |
|---|---|---|---|
| | Reference | aOR | aOR |
| **Age** per 10y increase | 1 (ref) | 1.30 (1.19-1.41) | 0.83 (0.76-0.91) |
| **Transgender identity** (vs. cisgender) | 1 (ref) | NS | 4.63 (1.17-18.35) |
| **Medium-urban residency** (vs. urban) | 1 (ref) | NS | 1.84 (1.40-2.41) |
| **Rural residency** (vs. urban) | 1 (ref) | NS | 1.72 (1.17-2.54) |
| **Outness** (vs. not out) | 1 (ref) | 0.73 (0.54-0.98) | 0.49 (0.36-0.66) |
| **<2 casual sex partners** (vs. >2) | 1 (ref) | 0.30 (0.22-0.40) | 0.37 (0.27-0.49) |
| **Financially struggling** (vs. not struggling) | 1 (ref) | 1.48 (1.06-2.08) | 1.76 (1.26-2.48) |

**Multilevel results: 8% of HIV-testing variance was explained by between-country differences**

- ICC = 7.6% for non-recent
- ICC = 8.3% for never-testing
- Both outcomes were most prevalent in German-EMR

| *Table 2. Between-country differences in HIV testing* | EMR-NL | EMR-BE | EMR-GER |
|---|---|---|---|
| **Recently tested** | 64% | 60% | 48% |
| **Not-recently tested** | 20% | 16% | 24% |
| **Never tested** | 16% | 22% | 28% |

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