IMPLEMENTATION OF HIV TEAMS SUSTAINABLY IMPROVES HIV INDICATOR CONDITION TESTING RATES IN HOSPITALS IN THE NETHERLANDS: THE #AWARE.HIV STUDY

On behalf of the #aware.hiv project group

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BACKGROUND

- **Missed opportunities** contribute to **late HIV diagnoses** impacting many people worldwide
- In the Netherlands, **about half** (47%) of the people newly diagnosed with HIV are **diagnosed late**
- HIV indicator condition-guided testing helps to **identify undiagnosed HIV infections**
- Aim: to evaluate the effect of HIV teams on hospital-based HIV indicator condition-guided testing

METHODS

- Ongoing multicenter prospective implementation study
- Data collected on **all newly registered diagnoses** of patients **≥18 years** who entered care between **January 2020** and **July 2023**
- Patients **already diagnosed with HIV** were **excluded** for analysis
- Potential HIV indicator conditions were flagged using automated **ICD-10** and **standardized health insurance (DBC) codes**
- HIV team intervention consisted of **department-specific educational sessions** and proactive **HIV testing recommendations**
- Outcomes: **HIV testing rate** in patients with HIV indicator conditions, HIV testing rates over time and per specialty, HIV positivity rate, reasons not to test for HIV

RESULTS

- 313,666 diagnoses were newly registered, including **2,506 HIV indicator conditions** (443 pre-implementation and 1,952 post-implementation)
- **Overall HIV testing rate increased** from **50.1%** (222/443) pre-implementation to **80.7%** (1,575/1,952) post-implementation of HIV teams (p<0.001)
- Overall HIV testing rate showed a **sustained increase** over time (range 72.4% - 90.4%) (*Figure 1*)
- HIV team intervened 411 times resulting in **69 (16.3%) extra HIV tests**
- HIV testing rates **increased** in **all specialties**, with the biggest increase in gynaecology (*Figure 2*)
- HIV positivity rate was **0.4%** (1/222) pre-implementation versus **0.6%** (9/1,575) post-implementation of HIV teams
- **Women** (aOR 0.59, CI 0.45 – 0.79, p<0.01) and patient with **indicator conditions without HIV testing recommendations** in national guidelines (aOR 0.36, CI 0.27 – 0.48, p<0.01) were **less often tested** for HIV
- Reasons not to test for HIV were often (50.6%) **not provided**, if provided most often the patient was **lost to follow-up** (18.4%)

Figure 1: HIV testing rate over time at Erasmus MC

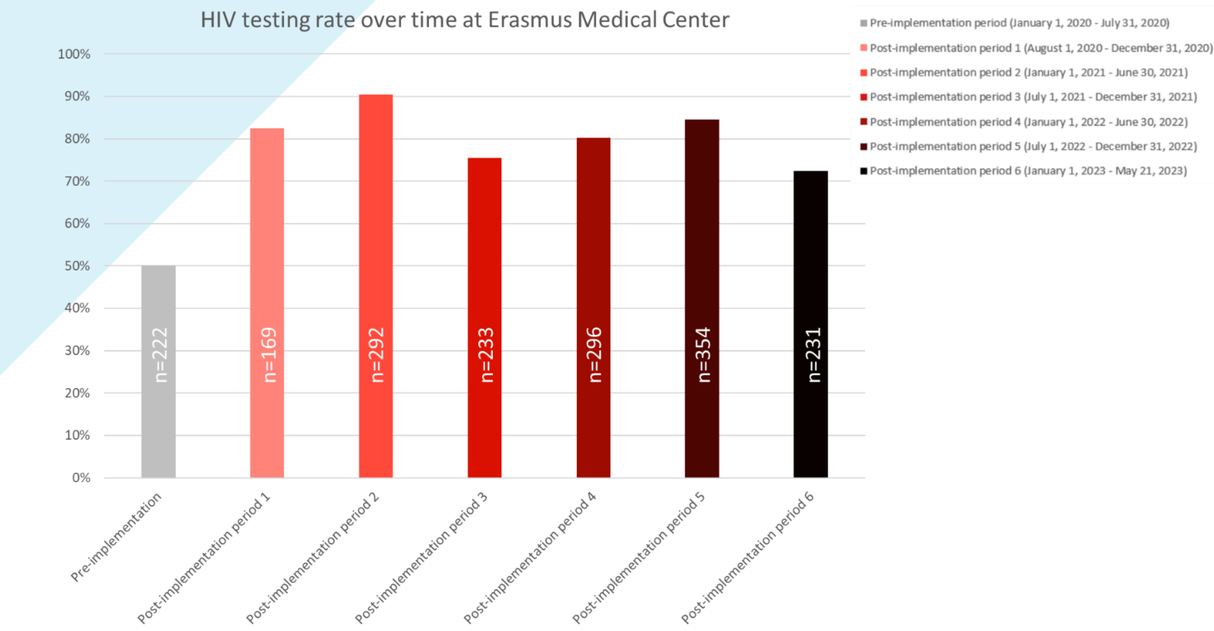
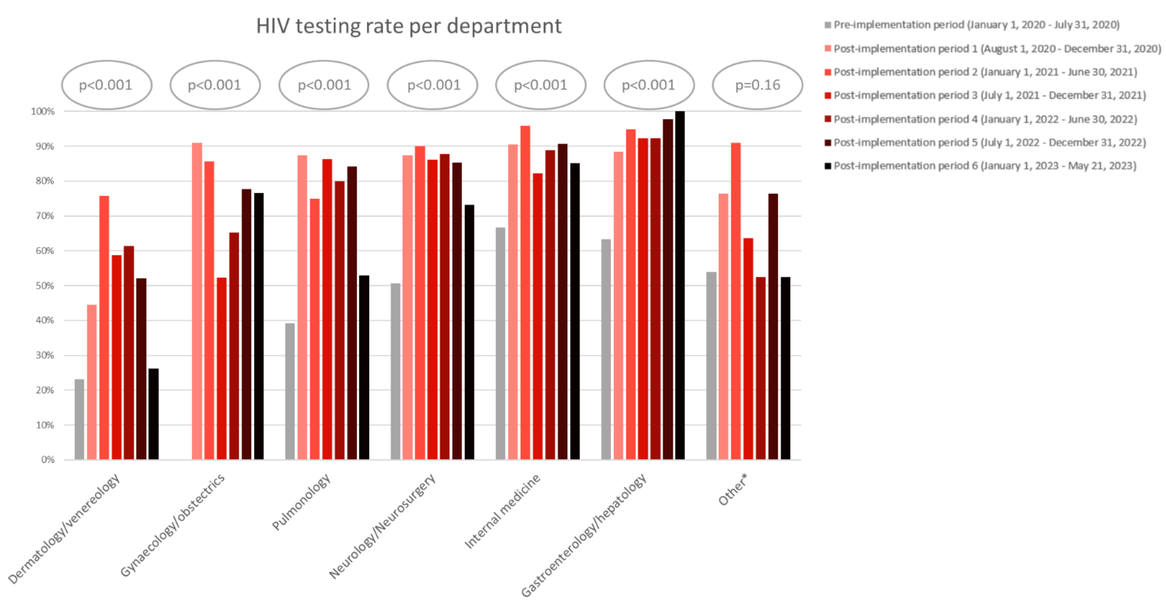


Figure 2: HIV testing rate over time per specialty



p-value indicates the comparison between the mean proportion of HIV indicator conditions per specialty tested for HIV pre-implementation versus the mean proportion of HIV indicator conditions per specialty tested for HIV post-implementation calculated using Chi-Square tests
* Other included the following departments: cardiothoracic surgery, ophthalmology, orthopedic surgery, otorhinolaryngology, psychiatry, rheumatology, surgery, and urology

CONCLUSIONS

- Implementing HIV teams in hospitals **significantly** and **sustainably increased** HIV indicator condition-guided testing
- The results of this study support the **broader adoption of HIV teams** in diverse hospital settings
- Which is going to be realized as **#aware.hiv Europe,** expanding to twenty hospitals in ten European countries to further roll-out this project

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