

BREACH
BELGIAN RESEARCH AIDS&HIV CONSORTIUM



Best Posters Contest

12 Posters

- 2 Basic Science
- 4 Clinical Science
- 6 Social Science

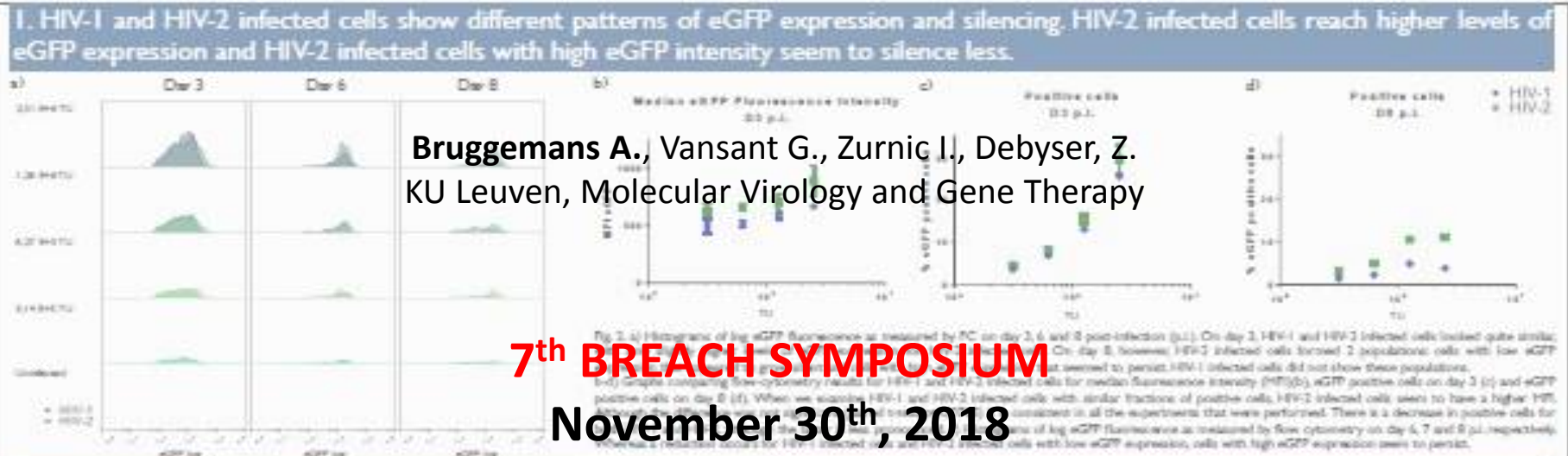


Comparing latency profiles of HIV-1 and HIV-2.

BEST POSTER

Basic Science

“COMPARING LATENCY PROFILES OF HIV-1 AND HIV-2”



3. Upon reactivation, mostly HIV-2 infected cells seem to reactivate slower than HIV-1 expression are reactivated, whereas reactivation of HIV-1 infected cells.



Diagnosing who?

Data from the national HIV surveillance, Belgium, 2016-17

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BEST POSTER

Introduction

Early diagnosis of HIV infection is essential in order to permit rapid initiation of antiretroviral therapy, to reduce the risk of onward HIV transmission, and to allow for early diagnosis and diversification of pathways for care. This analysis aims to gain a better insight into the specialization of physicians diagnosing HIV infection in Belgium.

Results

Specializations of diagnosing physicians

The SSN was available for 1611 (90%) patients diagnosed with HIV in 2016-2017. Half of the cases were diagnosed by GPs, followed by internists and obstetricians/gynecologists (Table 1).

Table 1. Distribution of specializations of physicians performing HIV diagnosis in 2016-2017.

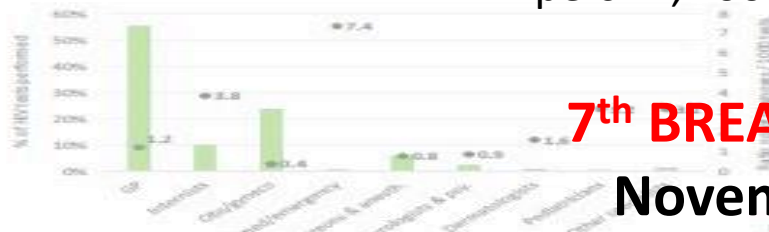
Physician specialization	2016, N (%)	2017, N (%)	2016-17, N (%)
GP	406 (54%)	426 (45%)	832 (52%)
Internal medicine	210 (28%)	253 (27%)	463 (29%)
Gynecology - Obstetric	49 (7%)	56 (7%)	105 (7%)
Acute medicine - emergency	22 (3%)	30 (3%)	52 (3%)
Surgery - anaesthesiology	22 (3%)	35 (4%)	57 (4%)
Psychiatry - neurology	12 (2%)	35 (4%)	47 (3%)
Dermatology	9 (1%)	10 (1%)	19 (1%)
Pediatrics	5 (1%)	10 (1%)	15 (1%)
Other	15 (2%)	33 (4%)	48 (3%)

Structure dedicated to concentrated and/or specialized HIV/AIDS HIV testing centre, STI clinic): 12% by internists, 6% by GPs, 1% by obstetrician/gynecologists and 1% by other specialists. GPs working for organizations supporting sex workers diagnosed 1% of the cases.

Number of new diagnoses by tests performed

In 2016-2017, 757/179 HIV tests performed by GPs, representing half of the number of tests performed. In comparison, the ratio of tests performed by GPs was 3 per 100 tests performed. In comparison, the ratio was higher among specialists in acute medicine/emergency (7.4), followed by obstetrician/gynecologists (3.8).

Figure 1: Proportion of tests performed and ratio of number of diagnoses per 100 tests performed, by grouped specializations.



Conclusions

The 2016-17 national HIV surveillance data show that the majority of HIV diagnoses were made by GPs, followed by internists. This suggests the existence of underlying barriers to HIV testing for these populations by GPs. These might be present at the level of the access to GP, as well as at the level of testing proposal (patient or provider initiated). Improving GP's skills on sexual health, and their role as HIV epidemic and of indicator of outside healthcare settings with rapid

Diagnoses of key populations

The distribution of grouped specializations of diagnosing physicians by key newly diagnosed populations is illustrated in figure 2. From the 1000 newly diagnosed by key population, 2016-17.



Clinical Science

“ WHO IS DIAGNOSING WHO? ”

DATA FROM THE NATIONAL HIV SURVEILLANCE, BELGIUM, 2016-17 ”

Van Beckhoven D., Fransen K., Verhofstede C., Delforge ML.,

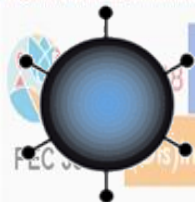
Van Den Wijngaert S., Pierard D., Hayette MP., Van Ranst M., Dessilly G.,

Apers H., Loos J., Sasse A., Deblonde J.

7th BREACH SYMPOSIUM

November 30th, 2018

Concertgebouw, Bruges



Quantifying the Impact of Reduced Investment in Integrated HIV Care Delivery In Belgium



BELGIAN RESEARCH AIDS & HIV CONSORTIUM and budget

S.J. Vermeersch¹, R. Demeester², S. Callens³, S. De Wit⁴, L. Annemans⁵

Context and objectives

In Belgium, AIDS Reference Centers (ARC) deliver patient centered, integrated HIV care by leveraging state of the art knowledge and expertise to provide multidisciplinary patient management. We developed an 'integrated patient-centered framework' to help drive value-driven financing approaches. The quantification of ARC value drivers is a key framework component. The present study quantifies the impact of disinvestments in ARC.

Methods

We leveraged the published BELHIVPREV model^b to assess the impact of budgetary disinvestments (€100 million) in 5 of the 10 key value drivers identified in the ARC value framework:

- 1 Prevent new infections
 - 2 Reduce the number of undiagnosed
 - 3 Link to care: visiting a healthcare provider after a positive diagnosis
 - 4 Retain in care: having viral load measured at least once per year
 - 5 Achieve and maintain virological control: viral load < 200 copies/ml
 - 6 Support quality of life
 - 7 Manage and reduce comorbidities
 - 8 Maintain sexual and reproductive health
 - 9 Perform data collection
 - 10 Drive and execute research
- Included in our analysis

^a See poster/abstract PED566 - A framework for value-based financing of integrated care for persons living with HIV

^b Detailed model description in Vermeersch et al. *Acta Clin Belg* 73 (1),54-67

We simulated 4 scenario's for 2020, which were further extrapolated to 2030: (i) current effort; (ii) reduced effort; (iii) additional effort; (iv) additional effort + reinforced outreach

	Current effort	Reduced effort	Additional effort	Additional effort + reinforced outreach
Undiagnosed	11%	12%	10%	6%
Treated	94%	92%	97%	97%
Viral load < 200 copies/ml	95%	94%	98%	98%
Linked to care	98,2%	95%	99%	99%
Retained in care	97,9%	97%	99%	99%

PEP (patients) 1.500 1.000 2.633 2.633

Model scenarios were based on hypothetical and realistic, current estimated parameter settings.

Cumulative costs were generated from 2015 to 2030 and assumed:

3M€/year investment (+60% of total Belgian ARC costs) in the 'additional effort' scenario.

2,2M€/year disinvestment (-43% of total Belgian ARC costs) in the 'reduced effort' scenario.

For the 'additional' and 'reduced' effort scenarios the ROI was calculated as the ratio of (cumulative budget impact - cumulative investment cost) over (cumulative investment cost).

Results



	Current effort	Reduced effort	Additional effort	Additional effort + reinforced outreach	RETURN ON INVESTMENT	COST OF NON-INVESTMENT
New diagnoses 2020 (patients)	899	1.121	803	513	2,4	-4,0
Annual budget 2020 (euro)	203 ME	202 ME	207 ME	209 ME		
Annual budget 2030 (euro)	254 ME	296 ME	211 ME	204 ME	Every € invested results in 2,4 € saved by 2030	Every € saved results in 4,0 € lost by 2030

Conclusions

Investing in integrated care remains critical in managing HIV disease and budget impact. Reducing ARC budgets leads to significant and lasting impact on the epidemic and healthcare budget expenditure.

This study, independently performed by the authors, was funded by Gilead Sciences Belgium (vba/sgr)

BEST POSTER

Social Science

“QUANTIFYING THE IMPACT OF REDUCED INVESTMENTS IN INTEGRATED HIV CARE DELIVERY IN BELGIUM”

Vermeersch S.J., Demeester R., Callens S., De Wit S., Annemans L.

7th BREACH SYMPOSIUM

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