

# HIV-CARE IN EUROPE: A COMPARATIVE STUDY OF PATIENT MANAGEMENT AND HEALTH SERVICES ORGANISATION IN FIVE SPECIALISED HIV-CLINICS

Apers L, Begovac J, Borges M, Leon A, Whetham J  
EmERGE consortium\*



**INSTITUTE OF TROPICAL MEDICINE**  
ANTWERP



Brighton and Sussex University Hospitals NHS Trust



## BACKGROUND, METHODS AND OBJECTIVE

FIVE HIV CLINICS ARE PARTICIPATING IN A EUROPEAN STUDY ('EMERGE') TO VALIDATE A MOBILE HEALTH APPLICATION FOR THE FOLLOW-UP OF STABLE PATIENTS. PRIOR TO THE STUDY A BACKGROUND ASSESSMENT WAS PERFORMED TO ENSURE DETAILED INSIGHT INTO THE ORGANISATION OF CARE IN THE RESPECTIVE CLINICS. A QUESTIONNAIRE WAS DESIGNED TO CAPTURE ALL ESSENTIAL ELEMENTS OF HIV CLINICAL CARE IN THE PARTICIPATING CLINICS. SITE VISITS ENABLED THOROUGH INFORMATION GATHERING. THIS ASSESSMENT WAS NECESSARY TO BE ABLE TO INTEGRATE THE M-HEALTH APPLICATION INTO THE EXISTING HEALTH SYSTEMS.

## RESULTS

2014	HCB (Ba)	CHLC (Li)	KIB (Za)	BSUHT (Br)	ITM (A)
Total nr of patients in follow-up at the end of 2014	4757	4846	862	2241	2570
Mean age (years)	44,9 (SD: 11)	48,5 (SD: 9.4)	44,2 (SD: 11.5)	46 (SD: 11.0)	45,1 (SD: 11.0)
Median age Q2 (Q1-Q3)	43 (37-51)	47	42,5 (36-51)	46 (38-53)	45,1 (37-53)
Male/female ratio	4,16	2,5	6,8	7,3	2,8
> 50 years	1454 (30%)	2043 (42,1%)	234 (27,4%)	848 (37,8%)	848 (33%)
< 18 years	0	0	10 (1,3%)	2 (0,09%)	1 (0,04%)
IV drug users	665 (14%)	-	30 (3,5%)	45 (2%)	25 (0,97%)
Nr of MSM (%)	2648 (55,7%)	-	561 (66%)	1761 (78,5%)	1064 (41,4%)
Nr of non-nationals (%)	2213 (46,5%)	-	7 (0,9%)	665 (29,7%)	907 (35,3%)

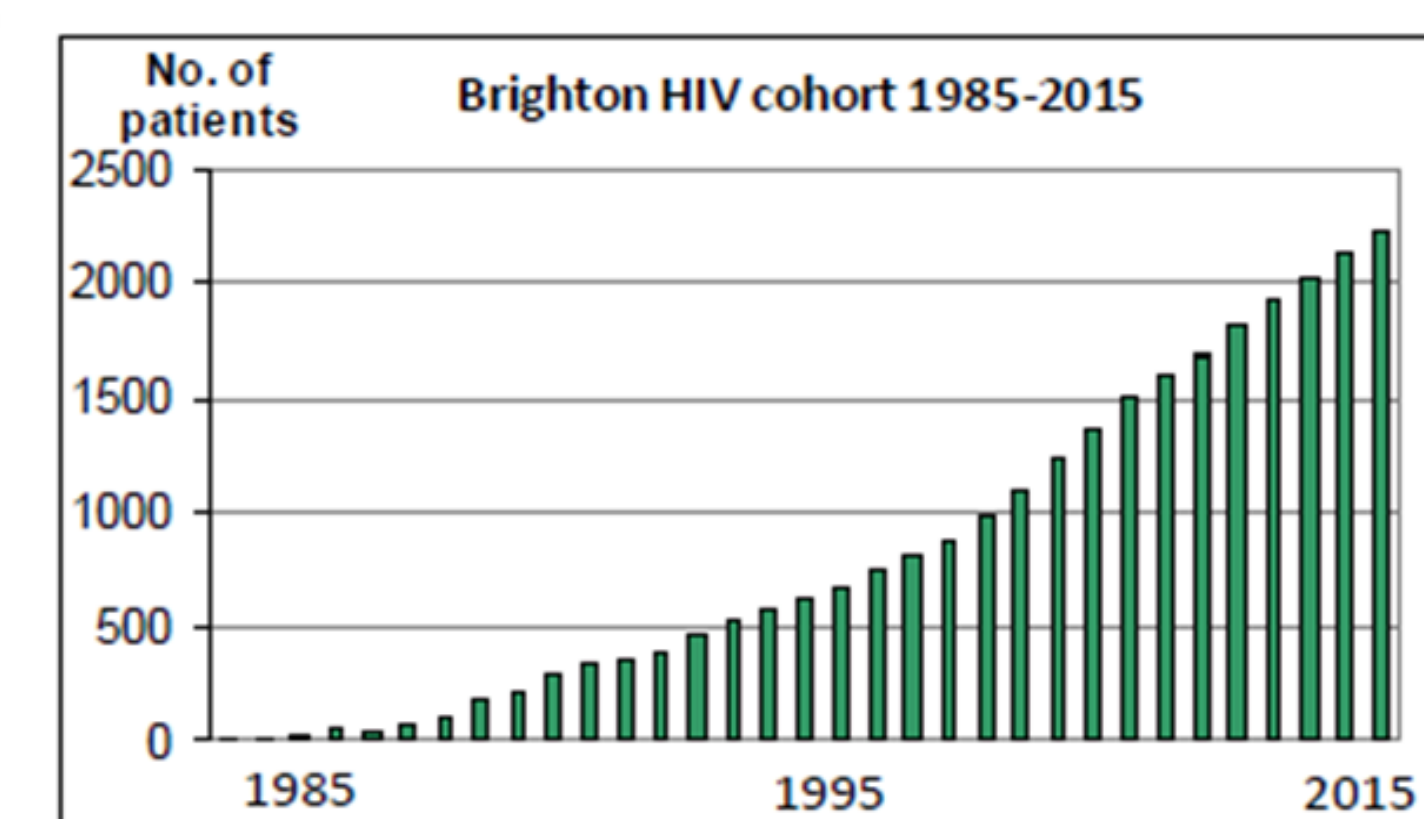
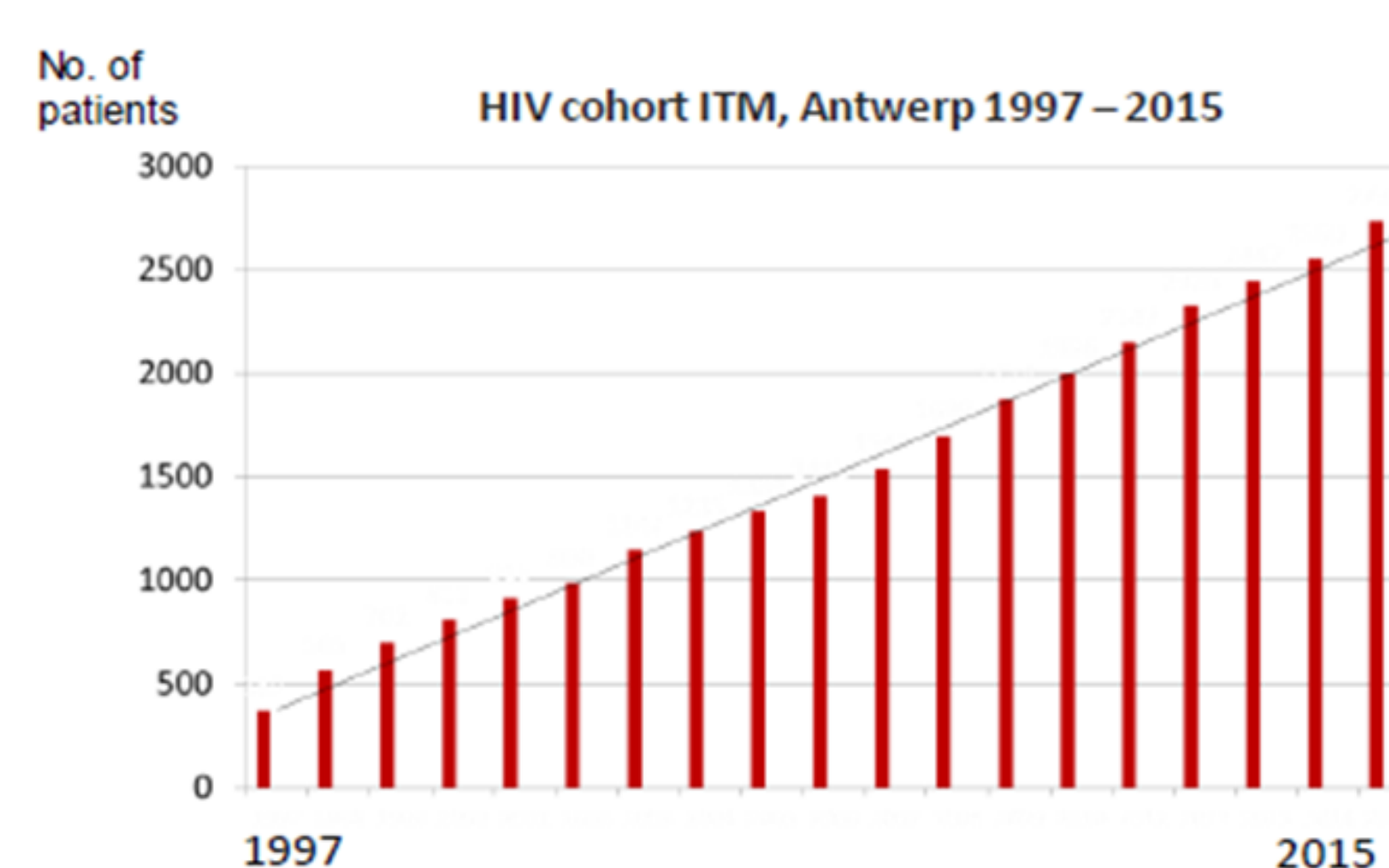


Fig 1: Cumulative figures for two selected clinics: total number of patients in follow-up at the end of each year.

A patient in follow-up at the clinic: A patient that has attended the clinic at least two times in that year.

Table 1: Population characteristics 2014 for five participating clinics:  
Hospital Clinic de Barcelona, Spain  
Centro Hospitalar de Lisboa Central, CHLC, Lisbon, Portugal  
Klinika za infektivne bolesti, KIB, Zagreb, Croatia  
Brighton and Sussex University Hospitals NHS Trust, BSUHT, Brighton, United Kingdom  
Institute of Tropical Medicine, Antwerp, Belgium

	HCB (Ba)	CHLC (Li)	KIB (Za)	BSUHT (Br)	ITM
Nr of P on health insurance	100%	100%	100%	No private patients, all covered by NHS	92,6%
Statute of the employees	On a fixed salary	On a fixed salary	On a fixed salary	On a fixed salary	On a fixed salary except one independent physician
Mode of payment	Capitation fee without patient contribution	Capitation fee for HIV services. Fee for service for all others, without patient contribution (completely free)	Fee for service, without patient contribution (completely free)	National Health System: free at the point of care	Fee for service, reimbursed + Capitation fee: subsidies +/- 25% patient contribution
Who is paying for ARVs	100% reimbursed by government	100% reimbursed by government	100% reimbursed by Croatian Health Insurance Fund	100% reimbursed by government	100% reimbursed by mutualities (parastatals)

Table 2: Financial aspects

2014	HCB (Ba)	CHLC (Li)	KIB (Za)	BSUHT (Br)	ITM
Proportion of patients on treatment at the end of 2014*	4576/4757 (96.2%)	4458/4846 (92.08%)	801/862 (93%)	1969/2235 (89%)	2365/2570 (92%)
Proportion of patients undetectable (<50cc/ml) at the end of 2014**	4484/4576 (98%)	-	711/801 (88.8%)	1743/1833 (95%)	2137/2365 (90.4%)
Retention in care rate	4649/4758 (97,7 %)	92,7 %	749/783 (95,7 %)	>99%	2361/2462 (95.9%)
Lost to follow-up rate	345/4757 (7,25 %)	-	24/783 (3 %)	8/2241 (1%)	243/2479 (9.8 %)
Total nr of HIV consultations (doctor contacts)	9150	-	-	7063	6876
Average number of contacts/patient	1,9	-	-	3,2	2,7
Proportion of patients with GP	100%	+/- 60%	100%	88%	+/- 80%

Table 3: Selected variables describing patient outcomes and health services organisation

\*Denominator: total number of patients at the end of 2014

\*\*Denominator: total number of patients on treatment

Retention in care rate: numerator: all patients that had at least two contacts in 2014, minus the new patients diagnosed in 2014; denominator: all patients that had at least two contacts in 2013.

Lost to follow-up rate: numerator: patients that had no contact in 2014, minus deaths and documented transfer out; denominator: all patients that had at least two contacts in 2013, including the new patients diagnosed in 2013.

## CONCLUSION

THIS ASSESSMENT GIVES AN INTERESTING INSIGHT INTO DIFFERENT MODELS OF HIV HEALTHCARE IN A EUROPEAN SETTING. ALL CLINICS WERE ACHIEVING GOOD CLINICAL OUTCOMES, DESPITE OPERATING IN HEALTH SYSTEMS THAT ARE DIFFERING IN MANY ASPECTS. THE EMERGE PROJECT FOCUSES ON REDESIGN OF THE STABLE PATIENT PATHWAY, REDUCING VISITS USING M-HEALTH TECHNOLOGIES.

\*"EmERGE is a project funded by the European Union's Horizon 2020 Research and Innovation Programme under Grant agreement no: 643736".