# ROMANIA IN HIV/AIDS NUMBERS 1985-2017 CASCADE OF CARE IN HIV/AIDS INFECTION

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**BACKGROUND:** ECDC's annual report on the status of HIV epidemic in Europe, released in November 2017 states that during 2006-2016 the trend of diagnoses was stable, namely 6.8 and 6.9/100.000 in the earlier period of surveillance to 5.9/100.000 in 2016. [1] In this context, besides interventions and financial investment in the National HIV/AIDS programme, Romania has also adapted and implemented ECDC's monitoring tool Cascade of Care.

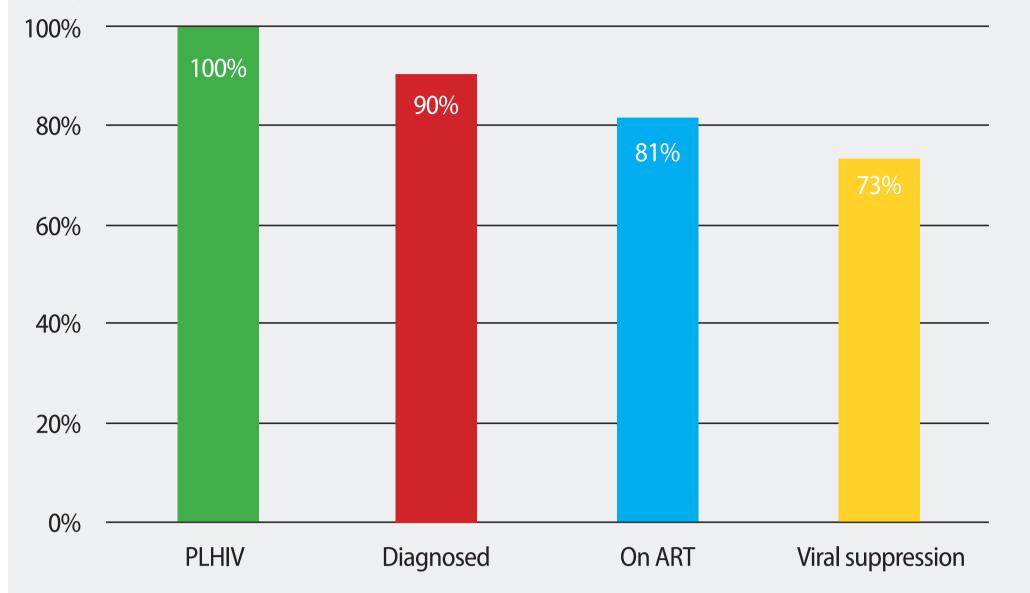
OBJECTIVE: to identify the inconsistencies between the numbers of diagnosed and undiagnosed persons, access to public medical services, success and gaps in the specific national interventions using the Continuum of Care monitoring tool.

MATERIAL AND METHOD: Each stage of the continuum was adapted and applied to the statistical data centralized annually in the National HIV/AIDS Data Base. Given our country's specific epidemic, the essential factors that help perform a correct evaluation of the HIV cascade of cares in Romania are: the Romanian Cohort infected in the late 1980s and early 1990s, with multiple ART schemes (33% more than three therapeutic schemes) and therapeutic fatigue; new HIV cases detected in young people in their fertile age with low CD4 count at the time of diagnoses (<350 cel/mm3) and who represent approximately 50% of the total number of cases; men who have sex with men (20,08% of the new cases in 2017), injecting drug users (13,18% from the total new cases diagnosed in 2017) and young mothers. [2].

## HIV DRUG THERAPY GLASGOW 28-31 October 2018 Scottish Event Campus Glasgow, UK

#### CASCADE OF CARE IN EUROPE AND CENTRAL ASIA

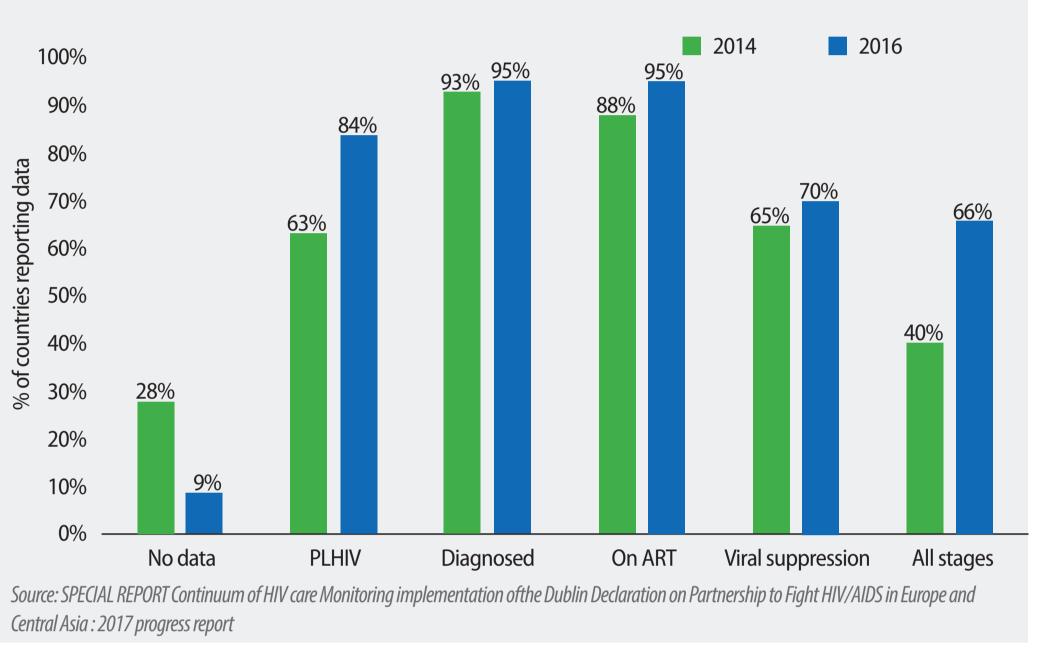
Figure 2. A four-stage continuum of HIV care monitoring framework with targets for Europe and Central Asia



**RESULTS:** Thus the numbers reflected by the continuum stages in Romania are: 15009 people living with HIV/AIDS (83% from the UNAIDS estimates of 16.000-18,000) registered in The national HIV/AIDS Data Base, of these 12806 (85%) persons are in active records, of these 11570 (92%) are under ART and finally from the latter- 7386 (68%) are virally suppressed (<50 copies/mL) [4]. From the overall 15009 patients in life, 5500 (37%) come from the Romanian cohort, non-vertically infected.

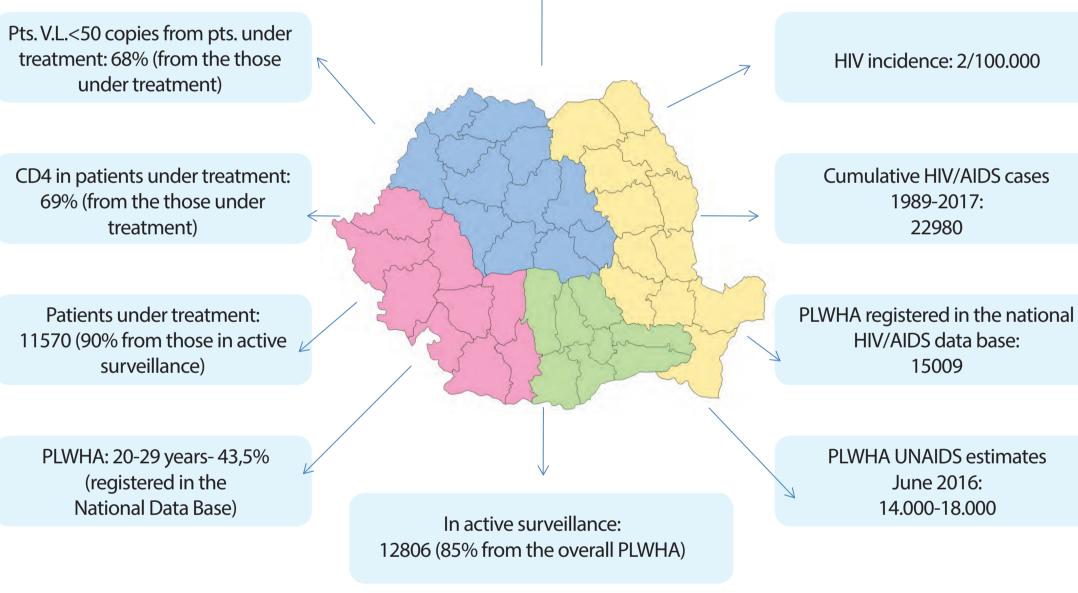
**CONCLUSIONS:** Given the desirable percentage of 74% virally suppressed of all people living with HIV [1], Romania's interventions should be adapted to the current epidemic status focusing on: the correct management of long term survivors, pre-exposure prophylaxis as means to prevent HIV transmission (which has the potential to reduce the risk of HIV transmission to seronegative partners), on pregnant women and perinatally exposed children, optimal therapeutic regimens for children, correct assessment of drug-drug interactions, multidisciplinary teams and maybe the most important one- universal HIV testing for all vulnerable groups.

Figure 3. Data availability for continuum oh HIV care by stage and year in reporting countries of Europe and Central Asia, 2014 (n=40) and 2016 (n=44)



ADS DeathSN   CONTACT Set of the		HIV EPIDEMIC IN ROMANIA 1985-2017	ROMANIA 20 MILLION PEOPLE	
		TYPE OF EPIDEMIC: Long terms survivors' cohort (early 1990s): 37% from the overall PLWHA New wave: young heterosexual adults, MSMs, IDUs, 2% MTCT		
800	20,000		Prevalence Annual Comments	

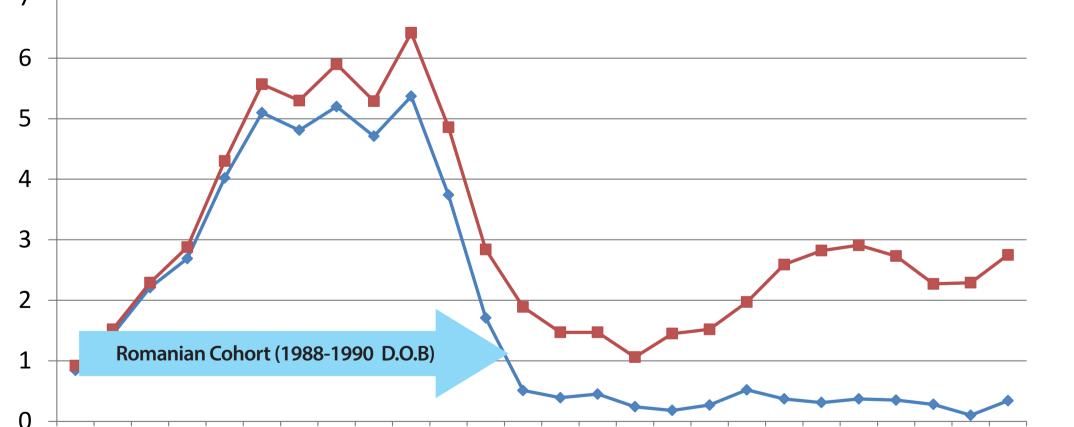




Incidence					
HIV1	0.07%	0.002%	725 new cases per year on average during 2007-2017: • 2007-2010 (538 cases/year) • 2011-2017 (850 cases/year)		
HBV	<b>5.6</b> % <sup>2</sup>	0.001% <sup>3</sup>	National vaccination: 21- fold decrease in incidence vs. 1995		
HCV	<b>1.9%</b> <sup>4</sup>	0.0003% <sup>3</sup>	-		
Co-infected HIV/HBV	<b>19.9%</b> <sup>5</sup>	<b>0.3</b> % <sup>1</sup>	43.4% in the "Romanian cohort" <sup>6</sup>		
<b>Co-infected HIV/HCV</b>	1.8% <sup>6</sup>	<b>0.2%</b> <sup>1</sup>	83% of IDUs in 2017		

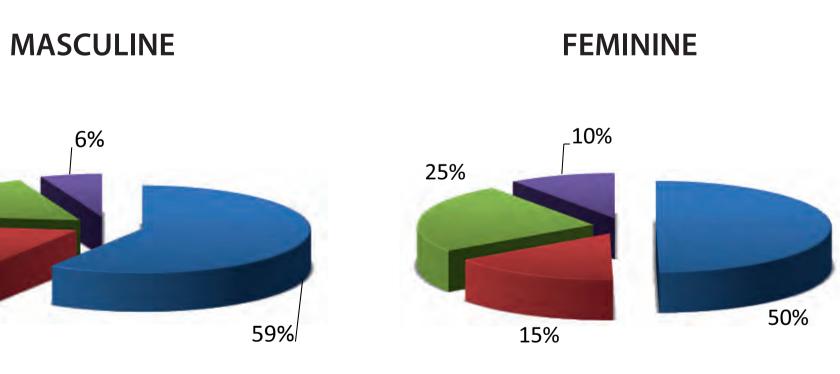
<sup>1</sup>Calculated based on: www.cnlas.ro. Data current through 30 Jun 2017; <sup>2</sup>Constantinescu I, et al, Hepat Mon. 2014;14(10): e22072; <sup>3</sup>Romanian National Institute for Public Health 2015. http://www.cnscbt.ro/index.php/rapoarte-anuale/; <sup>4</sup>RO 19.02 project; <sup>5</sup>Juganariu G et al, Rev Med Chir Soc Med Nat Iasi. 2014;118(2):339-45; <sup>6</sup>Ruță SM et al, MedGenMed. 2005; <sup>7</sup>(1): 68.

HIV INCIDENCE RATE IN ADULTS AND CHILDREN BETWEEN 1985-2017 (100.000)



#### CD4 VALUES IN NEW HIV/AIDS CASES IN ADULTS - 2017

### NATIONAL PROGRAMME EFFORTS FOR PLWHA NUMBER OF PREVIOUS ART SCHEMES 2017



✓ Since 2001- universal access to ART, (regardless of CD4 count for children)
✓ Since 2013- treatment introduction regardless of CD4 count (official stand)
✓ Given Romania's epidemic (the cohort)- >2 and >3 schemes- in long term survivors who were initiated

✓Newly detected cases- preferred regimen: NRTI+INST I

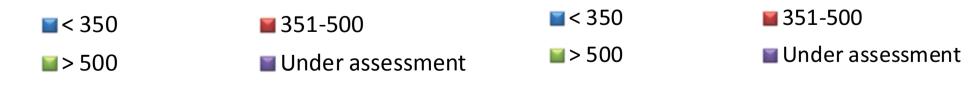
with ARV treatment, as children in 1995.

√Treatment regimens (PLWHA in ART): √59% 2 NRTIs + 1 Pl √19% 2 NRTIs + 1 NNRTI √12% II-containing regimens

#### 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

Children 2017: 0.34/100.000	CHILDREN	ADULTS
Adults 2017: 2.41/100.000		

Source: Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania INBI "Prof.Dr.M.Balş"



**CURRENT HIV TREATMENT CASCADE IN ROMANIA** 

Source: Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania INBI "Prof.Dr.M.Balş"

18%



2nd SCHEME 21%

🖬 1st SCHEME 🛛 📓 2nd SCHEME 🔛 3rd SCHEME 🖉 Other

Other

33%

**3rd SCHEME** 

14%

√In 2017-2018: 4 fixed-dose combinations registered

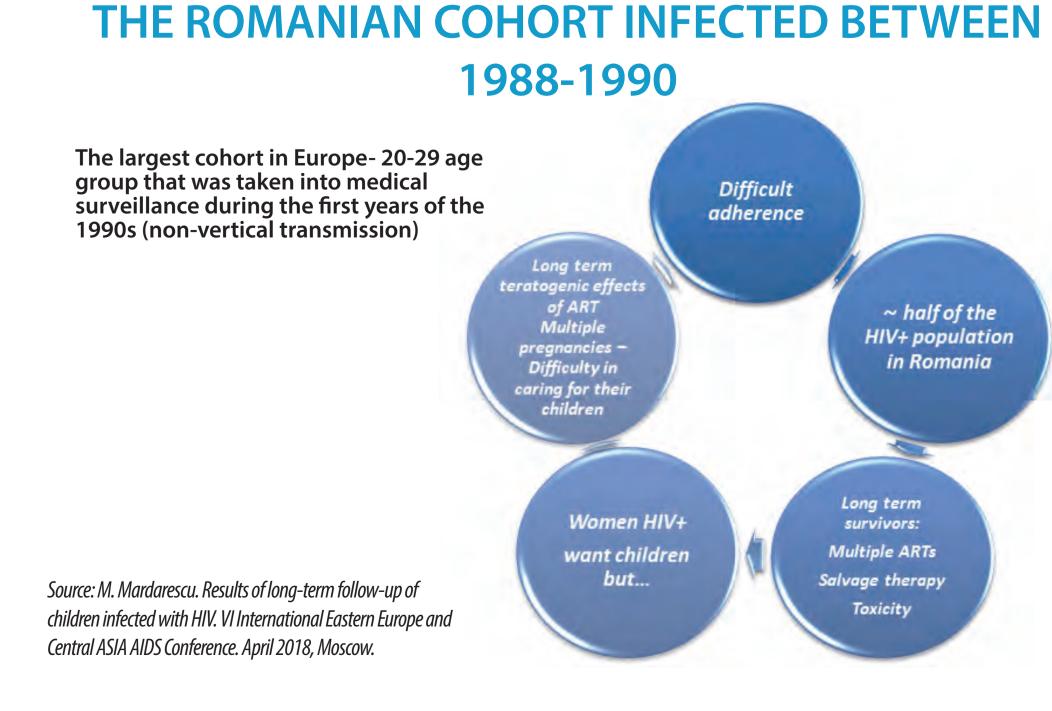
#### REFERENCES

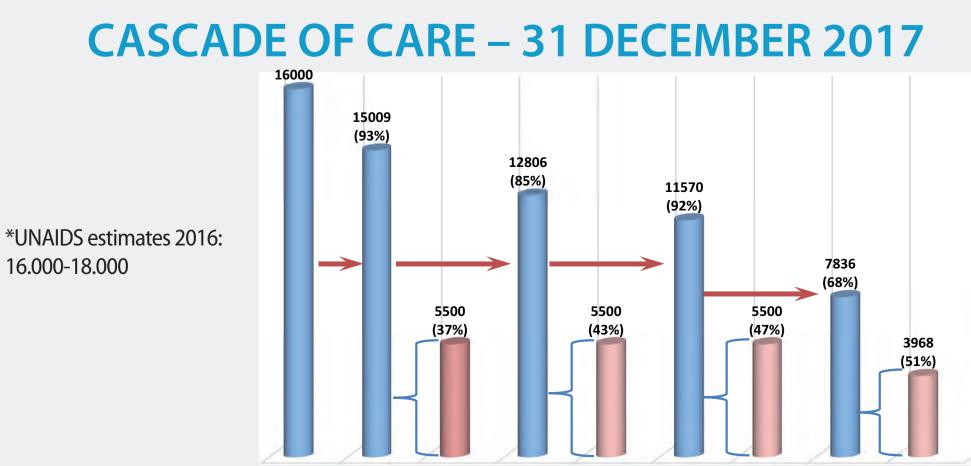
1.SPECIAL REPORT Continuum of HIV care Monitoring implementation of the Dublin Declaration on Partnership to Fight HIV/AIDS in Europe and Central Asia: 2017progress report.

2. HIV/AIDS surveillance in Europe 2017-2016 data. Surveillance Report https://ecdc.europa.eu/sites/portal/files/documents/20171127Annual\_ HIV\_Report\_over%2BInner.pdf/

3. Compartment for Monitoring and Evaluation of HIV/AIDS Data in Romania www.cnlas.ro

4. M. Mărdărescu. Romania's way to 2nd and 3rd 90s. ECDC/WHO Joint Meeting. HIV in Europe and Central Asia in the era of the SDGs: Operationalising goals and achieving targets. 23-25 April, 2018, Berlin





ESTIMATE NUMBER NUMBER PLWA IN PLWA IN PLWHAIN PLWHAIN VL <50 OF PLWHA OF PLWHA ACTIVE ACTIVE ART IN THE ART FROM COPIES/ML COPIES/ML PLWHA IN THE FROM THE RECORDS RECORDS NATIONAL THE (UNAIDS NATIONAL ROMANIAN IN THE FROM THE DATA BASE ROMANIAN PATIENTS ROMANIAN 2016)\* DATA BASE COHORT NATIONAL ROMANIAN COHORT WITH ART COHORT DATA BASE COHORT

Source: Compartment for Monitoring and Evaluation of HIV/AIDS Infection in Romania INBI "Prof.Dr.M.Balş"/ The National HIV/AIDS Data base Data currently under assessment