





# Improving quality of HIV care in Europe

Prof Jens Lundgren
CHIP, WHO Collaborative Centre,
Dept of Infectious Diseases
Rigshospitalet, University of Copenhagen



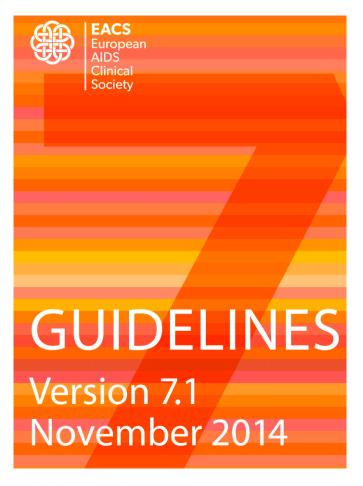




#### Two approaches to guiding care



#### Well resourced individual care:



#### Public health approach:





#### Aims of outpatient care in HIV+ populations



- Retain patients in follow-up
- Attend to sexual-related health issues
- Initiate ART (where appropriate) and ensure durable suppression
- Handle life-style-related comorbidity modification (smoking, alcohol, diet & exercise, addiction)
  - Provide preventive medicine incl harm reduction in IDUs (where appropriate)
- Handle and treat chronic HBV and HCV (where appropriate)
- Screen for other types of organ dysfunction and diseases
  - Depression & neurocognitive impairment
  - Chronic kidney disease
  - Chronic pulmonary disease
  - Cancer
  - Bone disease
  - Diabetes mellitus

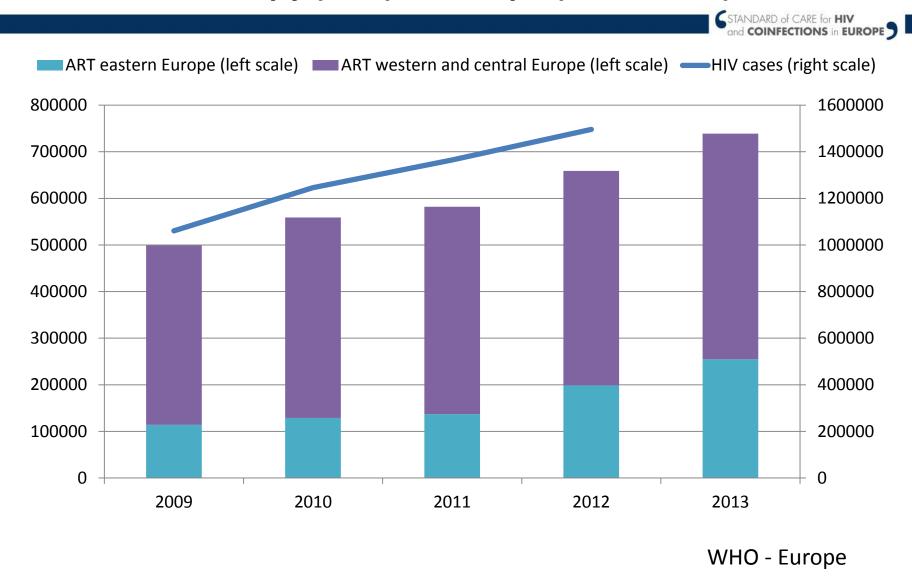


## Health Care for HIV+ – more than what happens in HIV clinics



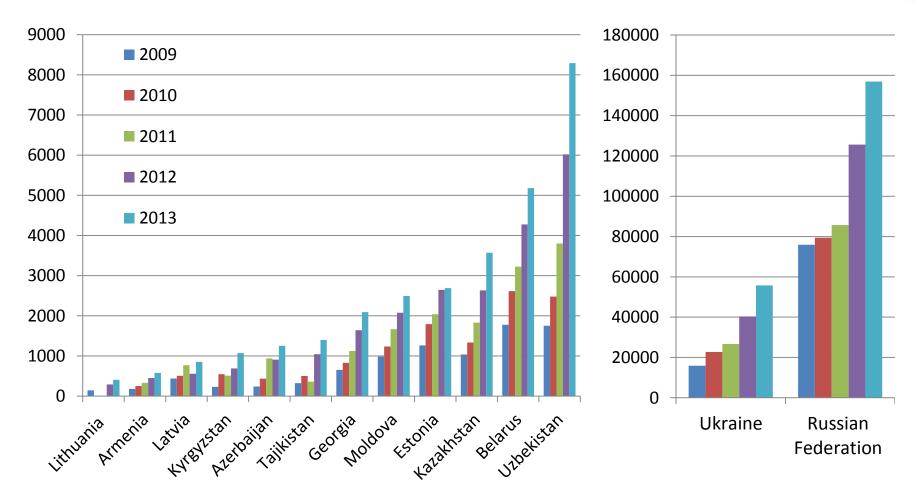
- Definition: Healthcare is the prevention, diagnosis, treatment, of disease, illness, injury, and other physical and mental impairments in humans
- Care is also to prevent, diagnose, transfer & and retain in care - not only when happens to persons retained in care
- In WHO-European region 100,000+ HIV+ persons died in 2013
  - 80%+ preventable if best care was provided
  - Trend continues to deteriorate

### People diagnosed with HIV and receiving antiretroviral therapy (ART) in Europe (2009-2013)



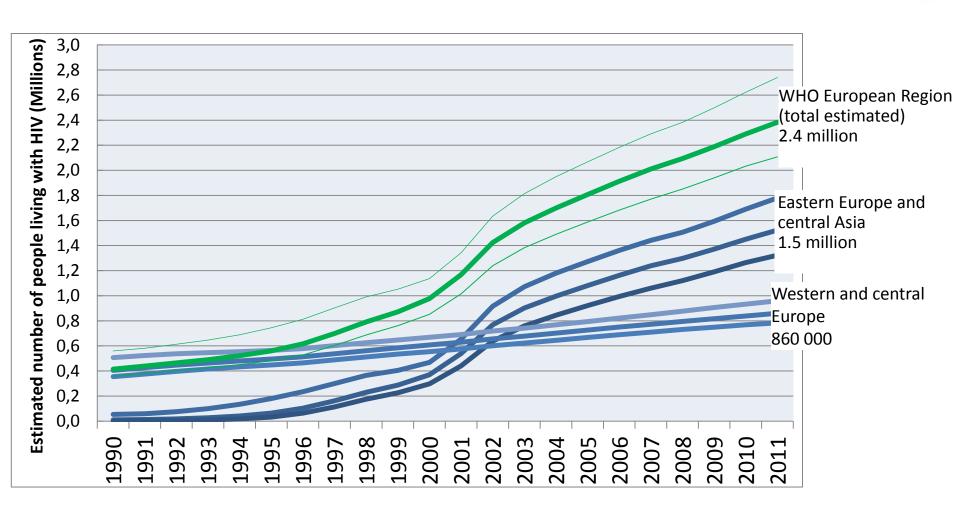
### Reported number of people (all ages) receiving ART in eastern Europe and central Asia (2009-2013)





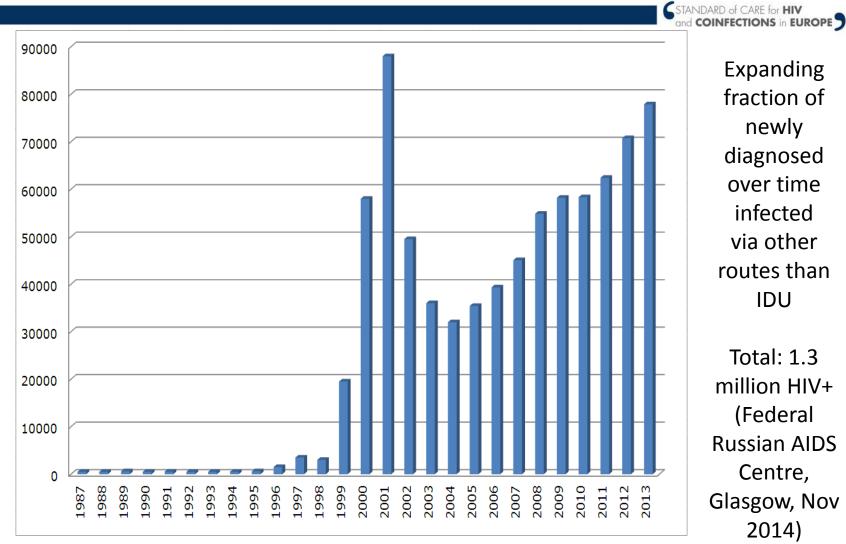
HIV epidemic in eastern Europe and central Asia the fastest growing in the world: Estimated # of people living with HIV in WHO-Europe, 1990-2011





AIDS Clinical Society MEETING

#### The number of new registered cases\* of HIV-infection in the Russian Federation 1987 - 2013



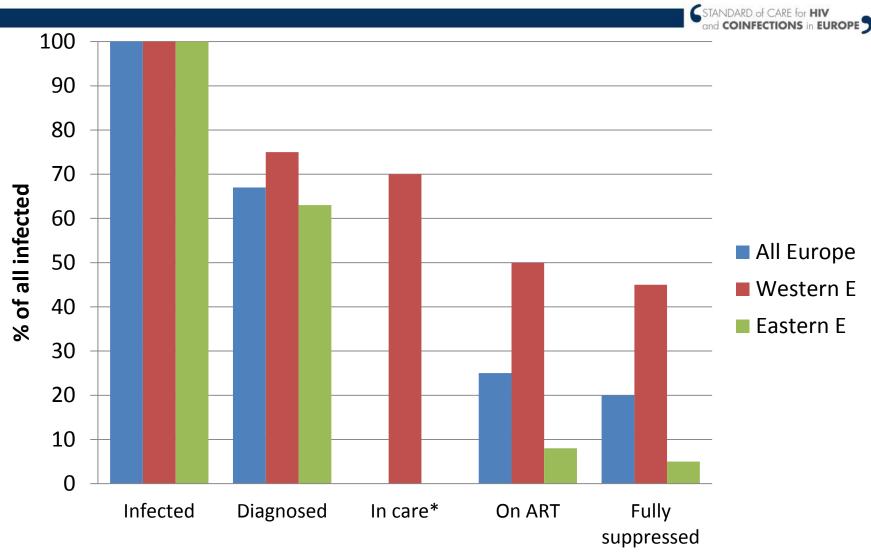
**Expanding** fraction of newly diagnosed over time infected via other routes than IDU

Total: 1.3 million HIV+ (Federal Russian AIDS Centre, Glasgow, Nov 2014)

"HIV infection in the Russian Federation"on http://www.hivrussia.org/

<sup>\*</sup> excluding children with uncertain diagnosis

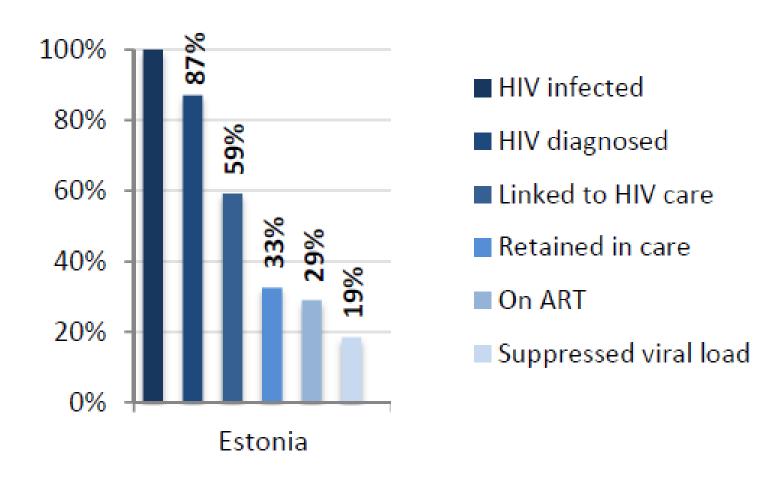
#### Continuum of care in Europe



<sup>\*:</sup> incomplete data on number of persons in care in Eastern Europe

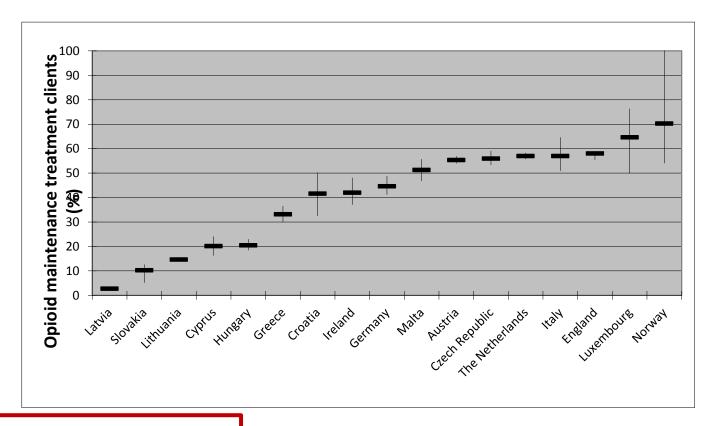
#### Continuum of care 2013 official statistics in Estonia





### Opioid substitution treatment clients as a percentage of the estimated number of problem opioid users





< 5% in Russia, Ukraine, Belarus, Stan-countries

2011 or most recent year; EMCDDA Statistical Bulletin 2013



## A whole talk on how to better retain problem injecting drug users in care

for the benefit of their own health

and do deal with this major driver of continued transmission in the Eastern region

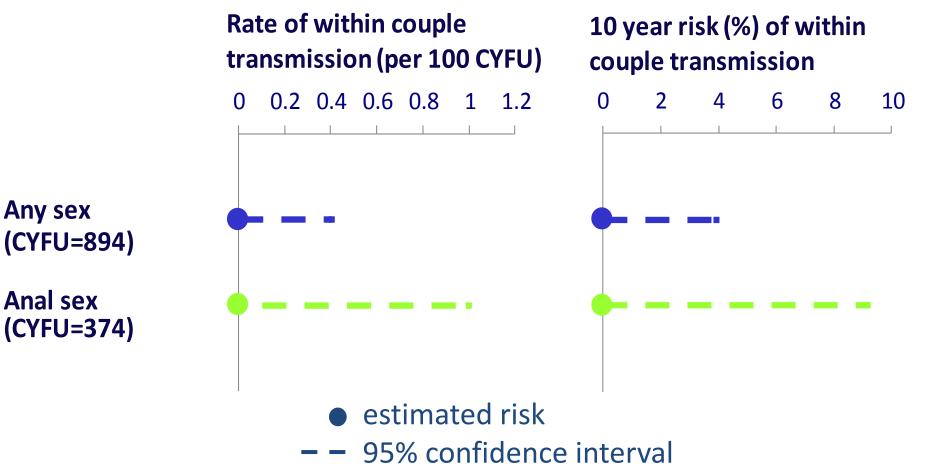
#### Care models for injecting drug users

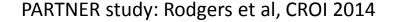


- Diversified care (multiple units involved)
  - Each unit has focus on e.g. addiction, general medical care, conditions requiring specialised care
  - Widely used
  - Similar structure as for rest of population
  - Many "problem IDU's" do not access this model
- Centralised care (single unit involved)
  - Located in community
  - Shared care
    - collaboration with experts that oversee specialised sections of care (e.g. prescription of ART, OST, TB, psychiatric medicine, etc),
    - medicine is distributed at unit
    - emerging concept in EU recommended by WHO

## Risk of HIV transmission among serodiscordant couples when HIV+ partner on ART

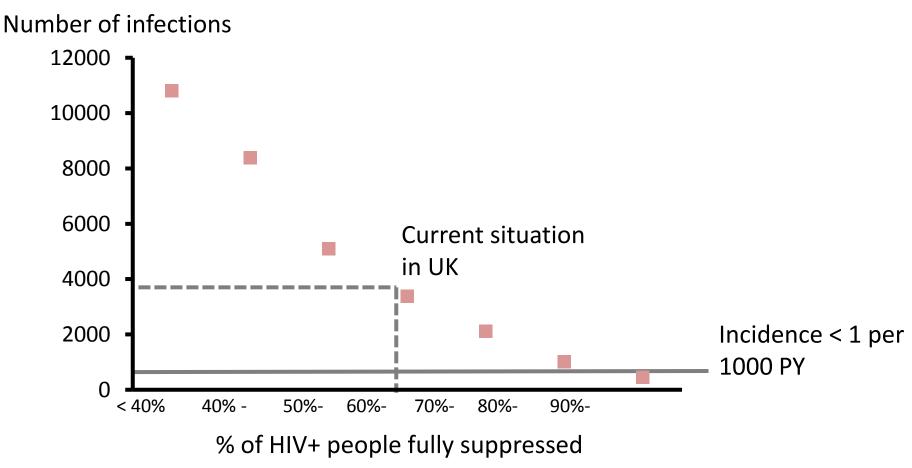






### Number of new infections per year among MSM in the UK according to % of HIV+ fully suppressed





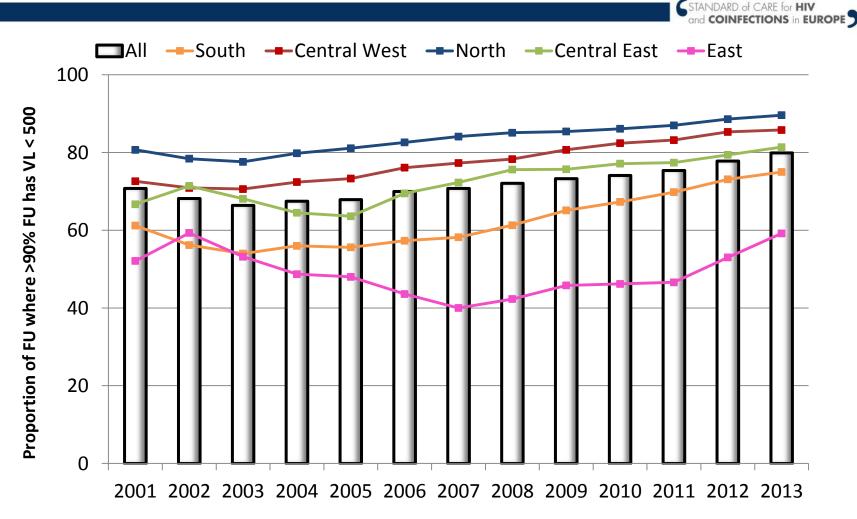
Based on 4813 model runs with good data fit to 2012. 95% confidence intervals are within squares.





Durable suppression: essential for individual care + :
Preserve drug options
Maintain low risk of transmission

### Durability of HIV suppression\*: the key indicator to benchmark for good ART care



\*: % of follow-up (FU) on ART where >90% FU has VL < 500

K Laut et al

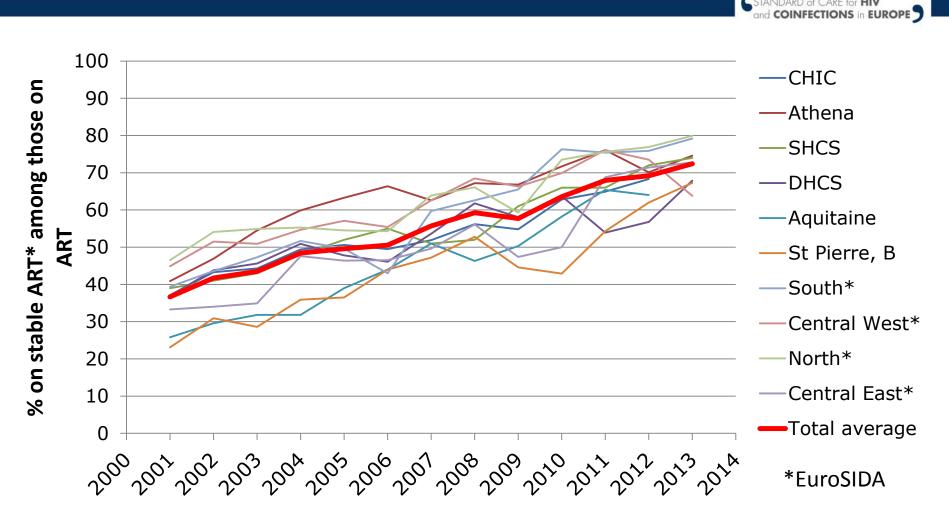
EuroSIDA (unpublished)



#### Reasons for success:

- Knowledgeable HIV+ persons
  - (understand why high adherence is critical)
- High level of expertise in HIV clinics
- Centralised care structures
- Durable well tolerated and effective medicine simple to take (QD and FDC) = "Stable ART"

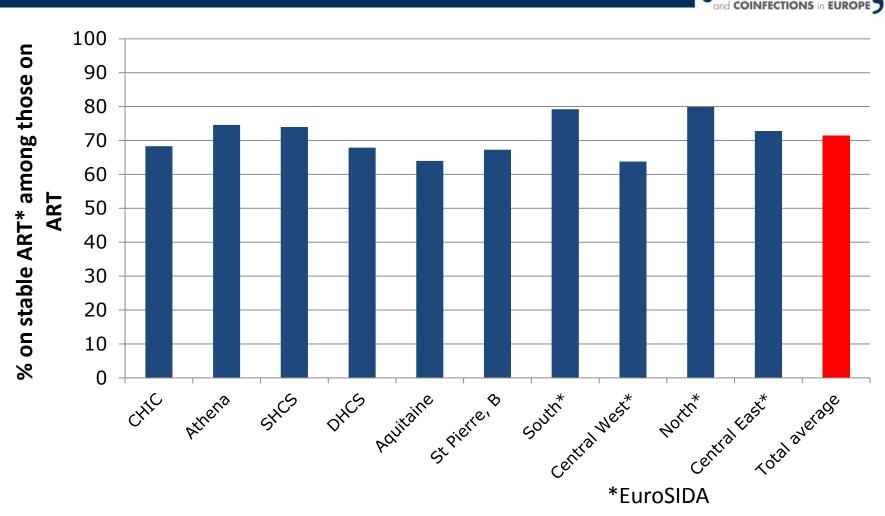
## Stabilization of care in Western/Central Europe: % of persons on fully suppressive and durable ART



<sup>\*:</sup> stable ART = on fully suppressive same drug combination in at least last 12 months



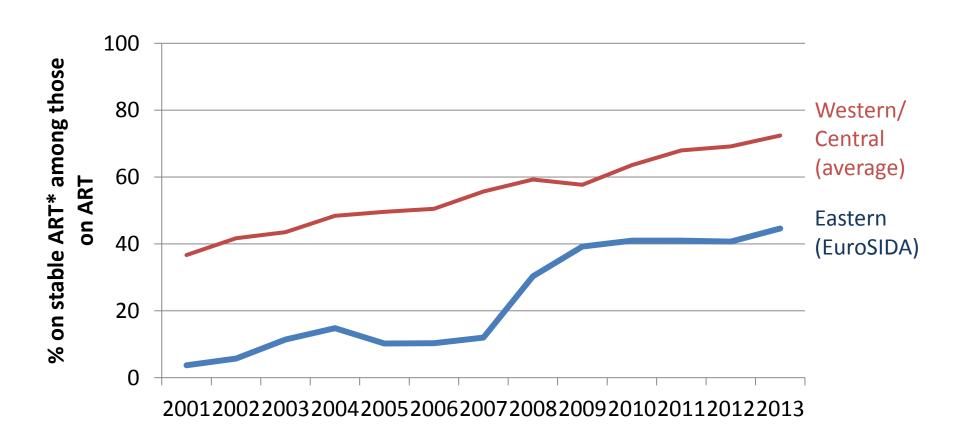
## Contemporary % of persons on fully suppressive and durable ART (latest data available)



\*: stable ART = on fully suppressive same drug combination in at least last 12 months



## Eastern vs average of west/central Europe: % of persons on fully suppressive and durable ART



\*: stable ART = on fully suppressive same drug combination in at least last 12 months



#### Stable ART



- True for 60-80 % of HIV+ on ART in Western/Central Europe
  - Duration of stable ART proxy for continued stability
  - HIV clinic visit interval extending (≤ 3 to 6-12 months)
  - Other sectors of health care system gets involved (GP)
- Focus areas
  - Ensure quality not compromised when restructuring
    - Maintain active surveillance of key care indicators
  - "One size do not fit all" individualisation and flexibility
  - Insight in HIV-specific particularities may vary
    - Shared care concept collaboration
    - HIV-specialist overall responsible for the HIV+ person

## Novel concepts in handling of HIV+ persons on stable ART at HIV clinics

STANDARD of CARE for HIV and COINFECTIONS in EUROPE

- Diversification of type of visit
  - Traditional f2f visit with responsible physician
  - Triage via experienced nurse
  - Community clinic
  - Telemedicine for most stable patients
- Focus areas
  - Ensure retainment in care if not retained
    - Systems (IT) able to identify
    - Proactive approach to re-enter incl. peer support
  - Shared care component
    - Shared access to electronic systems (lab, medicine, etc) allows for proactive alerts and prompts

### Summary – care across Europe (1)



- Comprehensive care of HIV+ persons involves
  - Handling HIV-specific issues
  - General medicine ↑ due to aging
- Poorly functioning care models remains in Eastern region
  - Major public and individual health crisis
  - Nucleus of solution better care of problem IDU = shared care

### Summary – care across Europe (2)



- Continued improvement over time in western Europe
  - 60-80 % on stable ART continues to  $\uparrow$
  - Other sectors of health system finvolvement
  - Ensure durable suppression and establish shared care
  - QC systems able to identify possible deterioration
  - Health system research efforts should be strengthened

### Summary – care across Europe (2)



- Continued improvement over time in western Europe
  - 60-80 % on stable ART continues to  $\uparrow$
  - Other sectors of health system finvolvement
  - Ensure durable suppression and establish shared care
  - QC systems able to identify possible deterioration
  - Health system research efforts should be strengthened

We - the HIV speciality community – have to continue to lead the way to ensure optimisation of quality of care for HIV+ persons

#### Acknowledgements



- Cohorts: Aquaitaine (E Pernot, F Dabis), Athena (L.A.J. Gras, P Reiss), CHIC (S Jose, C Sabin), Danish HIV Cohort Study (N Obel), EuroSIDA (A Mocroft), Swiss HIV Cohort Study (B Ledergerber), St Pierre (M Delforge, S deWitt)
- WHO-Europe: M Donoghoe, A Stengaard
- ECDC: A Amato
- CHIP: K Laut (ph.d. project), D Raben, O Kirk, J Grarup et al
- UCL: A Mocroft, A Phillips, C Sabin et al