HSE Position on **Antiretroviral Therapy** for all people living with HIV

July 2017

Background

The overarching vision of Ireland's first sexual health strategy,[1] launched in October 2015, is to improve sexual health and wellbeing and reduce negative sexual health outcomes. With respect to HIV, this calls for actions to reduce the number of new infections and ensure the health and wellbeing of those living with HIV.

These requirements are reflected in two of the priority actions in the strategy, specifically:

> "Assess, develop and implement guidance on (STI and) HIV testing in various settings to improve access and ease of testing and to include guidance on home based testing and the use of point of care HIV testing."

and

> "Develop and implement guidance to support the appropriate use of antiretroviral therapy in HIV prevention."

Antiretroviral therapy can be used for HIV prevention by treating those with established infection, known as Treatment as Prevention (TasP); through administration to those at risk of infection (Pre exposure prophylaxis, PrEP); or administration to those who may have been exposed to infection (Post exposure prophylaxis, PEP). National guidelines for the use of PEP have been in place since 2012[2]. There are no national guidelines for the use of TasP and PrEP.

In Ireland, in accordance with the Infectious Diseases Regulations, there is no charge to an individual for the treatment of HIV.[3 4]

This document sets out the current situation and the HSE position on the use of antiretroviral therapy (including TasP) for HIV infected people attending HIV services in Ireland.

Evidence and International Guidelines

Since highly active antiretroviral therapy (HAART) first became available in the mid 1990's enormous progress has been made in the treatment of people infected with HIV such that, for many, life expectancy is similar to that of the general population. Given the benefits of early initiation of antiretroviral therapy[5 6 7] over a range of economic settings, for those diagnosed with HIV, international guidelines recommend that antiretroviral therapy is offered to all people living with HIV regardless of immunological status (CD4 count).[8 9 10 11] Previous guidelines have recommended initiation of antiretroviral therapy at various clinical and immunological (CD4 count) thresholds.

In addition, there is robust clinical trial[12] and cohort data[13] demonstrating the effectiveness of antiretroviral therapy in preventing onward HIV transmission (TasP). International guidelines for the management of HIV now recommend TasP.[8 9 10 11]

Guideline recommendations, including the strength of the recommendations on the timing of antiretroviral therapy initiation for those diagnosed with HIV are shown in Appendix 1. Thus, current evidence indicates that all individuals living with HIV should be offered antiretroviral therapy, from a population perspective to reduce incident HIV infections (TasP) and, from an individual perspective to reduce morbidity and improve life expectancy.

In October 2014, UNAIDS issued the "90:90:90" statement. This is an ambitious global treatment target, to help end the AIDS epidemic. The target is that by 2020, 90% of all people living with HIV will know their HIV status; 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy and 90% of all people receiving antiretroviral therapy will have viral suppression.[14]

Current HIV care and practice in Ireland

In Ireland, HIV care is currently provided in nine hospital settings. Adult care is provided in Cork (Cork University Hospital), Dublin (Beaumont Hospital, Mater Misericordiae University Hospital, St. James's Hospital, St. Vincent's University Hospital), Galway (Galway University Hospital) and Limerick (Limerick University Hospital). Paediatric HIV care is provided in Dublin at Temple St. University Hospital and Our Lady's Children's Hospital.

In 2010, a national study of six adult HIV outpatient services found that of 3202 patients accessing care, 80% were on antiretroviral therapy of whom 87% had evidence of virological control (HIV-RNA levels <50cpm).[15] More recent results from personal communication and audits carried out at individual services between 2014 and 2016, indicate that between 92 and 100% of patients retained in care are on antiretroviral therapy with virological suppression rates of >/=90%.[16 17]

In June 2016 a cross-sectional study of healthcare professionals involved in the provision of HIV and STI care in Ireland was undertaken. Respondents prescribing antiretroviral therapy indicated that on average 90% (range 70-100) of their HIV patients were in receipt of antiretroviral therapy. Furthermore, 95% of respondents agreed that Ireland should adopt a policy of offering antiretroviral therapy to all HIV-infected individuals and 92% of respondents indicated they agreed (19%) or strongly agreed (72%) with the statement "In general, I recommend antiretroviral therapy for HIV-infected patients irrespective of CD4 count" and 86% reported that they "always" or "often" recommended initiation of antiretroviral therapy in HIV-infected patients with CD4+ >500 cells/mm.[18]

This suggests that, in Ireland, of HIV infected individuals engaged in care, the UNAIDS target of "90% in receipt of sustained antiretroviral therapy" has been reached and in many instances exceeded.

Development process

This document was developed by the Clinical Lead in Sexual Health at the HSE Sexual Health and Crisis Pregnancy Programme with input, advice and review by both the Sexual Health

Strategy Implementation and Clinical Advisory groups. The affiliation of the members of these groups is listed in Appendix 2 and includes community, service provider, service user and advocacy representation.

HSE position on Antiretroviral Therapy for all HIV infected people

The HSE recommends that all HIV infected individuals attending HIV services in Ireland are offered antiretroviral therapy as soon as possible and informed of the benefits of antiretroviral therapy in reducing HIV infectiousness (TasP) and improving their personal health.

Implementation and Monitoring

As outlined earlier available information suggests that the target of 90% in receipt of antiretroviral therapy for those attending services has already been met within existing services. Therefore this recommendation does not require a formal implementation plan.

A patient information leaflet outlining this recommendation is available in English, French, Spanish and Portuguese.

In order to monitor this recommendation an audit of clinical services will be undertaken in 2018. Further monitoring and audit will be guided by the initial audit findings with a view to annual assessment. This will serve to fulfill Ireland's obligation to report on the national response to the HIV epidemic to the European Centre for Disease Prevention and Control (ECDC) via the "Dublin Declaration on Partnership to Fight HIV/AIDS in Europe and Central Asia" and to the UN General Assembly via UNAIDS/WHO.

The first audit round will address the following:

- Number attending HIV services over the reporting time
- Number and proportion of those who attended over the reporting period on antiretroviral therapy
- Number and proportion of those on antiretroviral therapy over the reporting period virologically suppressed (at <200 copies/ml and <40 copies/ml).

Appendix 1

Guideline	Year Published	Recommendations	Grading System	Strength of Recommendation
British HIV association guidelines for the treatment of HIV-1-positive adults with antiretroviral therapy[19]	2015 (2016 interim update)	1) We recommend people with HIV start ART. 2) We recommend that individuals presenting with an AIDS-defining infection, or with a serious bacterial infection and a CD4 cell count. 3) We recommend all individuals with suspected or diagnosed PHI are reviewed promptly by an HIV specialist and offered immediate ART. 4) We recommend that ART is offered to all PLWH for the prevention of onward transmission. 5) We recommend the evidence that treatment with ART substantially lowers the risk of transmission is discussed with all PLWH. 6) An assessment of the risk of transmission to others should be made at diagnosis and subsequent visits.	Modified GRADE	1A 1B 1B 1A GPP GPP
European AIDS clinical society[20]	2015	1) Symptomatic HIV disease (CDC B or C conditions, incl. tuberculosis) at any CD4 count 2) Asymptomatic HIV infection • Current CD4 count < 350 • Current CD4 count ≥ 350 3) Treatment of Primary HIV Infection • Severe or prolonged symptoms • Neurological disease • Age ≥ 50 years • CD4 count < 350 cells/μL • Asymptomatic CD4 count > 350 cells/μL	Not specified but indicated as recommended (R) or strongly recommended (SR)	SR SR R SR SR SR SR R
Department of Health and Human Services Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents[21]	2016	1) Antiretroviral therapy (ART) is recommended for all HIV-infected individuals, regardless of CD4 T lymphocyte cell count, to reduce the morbidity and mortality associated with HIV infection. 2) ART is also recommended for HIV-infected individuals to prevent HIV transmission. 3) When initiating ART, it is important to educate patients regarding the benefits and considerations regarding ART, and to address strategies to optimize adherence. On a case-by-case basis, ART may be deferred because of clinical and/or psychosocial factors, but therapy should be initiated as soon as possible.	Rating of Recommendations: A = Strong; B = Moderate; C = Optional Rating of Evidence: I = Data from randomized controlled trials; II = Data from well-designed nonrandomized trials or observational cohort studies with long-term clinical outcomes; III = Expert opinion	AI AI
World Health Organisation Guideline on when to start antiretroviral therapy and on Pre-exposure prophylaxis for HIV[22]	2015	1) ART should be initiated in all adults living with HIV at any CD4 cell count 2) As a priority, ART should be initiated in all adults with severe or advanced HIV clinical disease (WHO clinical stage 3 or 4) and individuals with CD4 count ≤350 cells/mm3*	GRADE	Strong, moderate evidence Strong, moderate evidence

Appendix 2

Implementation Group Membership Affiliations

Organisation represented
HSE Sexual Health & Crisis Pregnancy Programme
HSE Public Health Departments
HSE Health Protection Surveillance Centre (HPSC)
HSE Primary Care
HSE Social Inclusion
HSE Acute Hospitals Division
HSE Mental Health
NGO sector
Irish College of General Practitioners (ICGP)
Service User Representative

Clinical Advisory Group Membership Affiliations

Organisation represented
HSE Sexual Health & Crisis Pregnancy Programme
HPSC, RCPI faculty of Public Health Medicine
Public Health, RCPI faculty of Public Health Medicine
RCPI institute of obstetricians and gynaecologists
Society for the Study of Sexually Transmitted Infections in Ireland (SSSTDI)
Infectious Diseases Society of Ireland (IDSI)
Irish College of General Practitioners (ICGP)
Clinical Microbiology (Faculty of Pathology)
Irish Society of Urology
Faculty of Occupational Medicine
Nursing and Midwifery Board of Ireland
Irish Pharmacy Union
Irish Association of Emergency Medicine
RCPI Faculty of Paediatrics
RCPI Collegiate Members Committee
Academy of Clinical Science and Laboratory Medicine of Ireland

References

[1] http://health.gov.ie/wp-content/uploads/2015/10/National-Sexual-Health-Strategy.pdf

[2] EMI toolkit, available at www.emitoolkit.ie

[3] http://www.irishstatutebook.ie/eli/1981/si/390/made/en/print?q=infectious+diseases&years=1981#

[4] http://www.irishstatutebook.ie/eli/2011/si/452/made/en/pdf

[5] Danel C et al. A Trial of Early Antiretrovirals and Isoniazid Preventive Therapy in Africa. N Engl J Med. 2015 Aug 27;373(9):808-22.

[6] Borges ÁH et al. Immediate antiretroviral therapy reduces risk of infection-related cancer during early HIV infection. INSIGHT START Study Group. Clin Infect Dis. 2016 Sep 8. pii: ciw621

[7] Molina JM et al. Initiation of Antiretroviral Therapy in Early Asymptomatic HIV Infection. INSIGHT START Study Group N Engl J Med. 2015 Aug 27;373(9):795-807.

[8] http://www.bhiva.org/documents/Guidelines/Treatment/2016/treatment-guidelines-2016-interim-update.pdf

[9] http://www.eacsociety.org/files/guidelines_8.0-english-revised_20160610.pdf

[10] Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and Human Services. Available at https://aidsinfo.nih.gov/contentfiles/lvguidelines/AdultandAdolescentGL.pdf

[11] http://apps.who.int/iris/bitstream/10665/186275/1/9789241509565_eng.pdf

[12] Cohen MS et al. Prevention of HIV-1 infection with early antiretroviral therapy. N Engl J Med 2011;365:493–505

[13] Rodger AJ et al. Sexual Activity Without Condoms and Risk of HIV Transmission in Serodifferent Couples When the HIV-Positive Partner Is Using Suppressive Antiretroviral Therapy. JAMA. 2016 Jul 12;316(2):171-81. doi: 10.1001/jama.2016.5148

[14] http://www.unaids.org/en/resources/documents/2014/90-90-90

[15] Tuite H, et al. Patients Accessing Ambulatory Care for HIV-infection: Epidemiology and Prevalence Assessment. Ir Med J. 2015 Jul-Aug;108(7):199-20

[16] Personal communication from clinics

[17] Ghavami-Kia B et al. Analysis of an HIV cohort cascade in the context of the UNAIDS 90:90:90 strategy. HIV Medicine 16:51-51. April 2015. https://www.researchgate.net/publication/296084326_

[18] Garvey P, Kiernan J, O'Leary A, Hurley C, Lyons F. Antiretroviral Therapy for HIV Prevention: A survey of Attitudes and practice amongst healthcare providers in HIV and STI care in Ireland. SSSTDI Autumn Meeting, 26th November 2016

[19] http://www.bhiva.org/documents/Guidelines/Treatment/2016/treatment-guidelines-2016-interim-update.pdf

[20] http://www.eacsociety.org/files/guidelines_8.1-english.pdf

[21] https://aidsinfo.nih.gov/contentfiles/lvguidelines/adultandadolescentgl.pdf

[22] http://apps.who.int/iris/bitstream/10665/186275/1/9789241509565_eng.pdf