Implications for a policy of initiating antiretroviral therapy in people diagnosed with human immunodeficiency virus: the CAPRA research programme

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Plain English summary

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Plain English summary

In the UK, the human immunodeficiency virus (HIV) is mainly transmitted by sex without a condom. Without antiretroviral therapy (ART), HIV wipes out key immune cells called cluster of differentiation 4 (CD4) cells. In the past, the CD4 cell count was allowed to drop to a certain, still-safe, level before starting ART, in order to balance the risk of side effects. Recent studies have shown that ART also dramatically reduces the risk of HIV transmission to a sexual partner, and an alternative policy of treating everyone with HIV from the time of their diagnosis has been considered. In this programme of work we focused on men who have sex with men (MSM), and investigated if a change in treatment policy – to treat all MSM infected with HIV from the time of diagnosis – would be an efficient use of NHS resources given the increased use of drugs. From our findings, we estimated that the benefits (i.e. preventing future HIV transmission) are likely to be greater than the cost of increased drug use and, therefore, that a change in treatment policy is likely to be cost-effective among MSM. Following the completion of our programme of work, a large clinical trial investigating whether or not treating people with a higher CD4 cell counts versus treating people with lower but still safe CD4 cell counts [the Strategic Timing of Antiretroviral Therapy (START) trial] has more health benefits, found that individuals infected with HIV have health benefits from starting earlier ART. These findings support our conclusion that ART initiation in MSM diagnosed with HIV is likely to be cost-effective. The results from the START trial are not presented in this report in any detail because only a substudy of sexual behaviour among START participants was investigated as part of the Comprehensive Assessment of the Prevention Role of Antiretroviral therapy (CAPRA) grant. This report presents the results from our cost-effectiveness analysis and the studies used to inform this analysis.

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