Objectives To quantify attrition between women testing HIV-positive in pregnancy-related services and accessing long-term HIV care and treatment services in low- or middle-income countries and to explore the reasons underlying client drop-out by synthesising current literature on this topic.

Methods A systematic search in Medline, EMBASE, Global Health and the International Bibliography of the Social Sciences of literature published 2000–2010. Only studies meeting pre-defined quality criteria were included.

Results Of 2543 articles retrieved, 20 met the inclusion criteria. Sixteen (80%) drew on data from sub-Saharan Africa. The pathway between testing HIV-positive in pregnancy-related services and accessing long-term HIV-related services is complex, and attrition was usually high. There was a failure to initiate highly active antiretroviral therapy (HAART) among 38–88% of known-eligible women. Providing 'family-focused care', and integrating CD4 testing and HAART provision into prevention of mother-to-child HIV transmission services appear promising for increasing women's uptake of HIV-related services. Individual-level factors that need to be addressed include financial constraints and fear of stigma.

Conclusions Too few women negotiate the many steps between testing HIV-positive in pregnancy-related services and accessing HIV-related services for themselves. Recent efforts to stem patient drop-out, such as the MTCT-Plus Initiative, hold promise. Addressing barriers and enabling factors both within health facilities and at the levels of the individual woman, her family and society will be essential to improve the uptake of services.