Clinical care, a group of more than 200 clinicians and researchers who specialize in HIV care or investigation formally protested the bill, which is expected to undergo further revision.

Remarkably, HIV infection has made the transition from death sentence to chronic condition in relatively short order. Laws that restrict the ability to collect, analyze, and appropriately share data on HIV-infected patients put them at risk for suboptimal care. HIV-positive patients should be treated in patient-centered, coordinated systems that ensure they receive all needed elements of care, for all their conditions. We believe it is time to remove special provisions for privacy that are based exclusively on HIV testing and diagnosis.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

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HIV and Aging — Preparing for the Challenges Ahead
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By 2015, half the U.S. population living with human immunodeficiency virus (HIV) infection will be older than 50 years of age. As antiretroviral therapy (ART) coverage continues to expand worldwide, this aging of the HIV epidemic will be mirrored in developing countries. In sub-Saharan Africa, ART has already reduced mortality rates, with 320,000 (or 20%) fewer people dying of HIV-related causes in 2009 than in 2004. Currently, HIV-infected Ugandans in their 40s who are receiving ART can expect to live well into their 60s. The increased life expectancy of HIV-infected persons will lead to increases in HIV prevalence among older adults. Approximately 1 in 8 HIV-infected adults and 1 in 10 patients receiving ART in sub-Saharan Africa are older than 50 years of age, and these ratios are likely to increase manifold in the coming decades (see maps).

Yet the world is unprepared to deal with an aging population with HIV. We are still learning about what determines the success of ART in older age groups, and our understanding of the future needs with regard to treatment for chronic noncommunicable diseases, such as cardiovascular disease and diabetes, in older HIV-infected adults in developing countries is very limited. To date, the focus of the global response to HIV has been on providing care to mothers, children, and the most severely immunocompromised patients. The June 2011 United Nations High-Level Meeting on AIDS emphasized the integration of HIV services with maternal and child health services but neglected the emerging evidence on the aging of the HIV epidemic. Similarly, the September 2011 United Nations High-Level Meeting on Non-Communicable Diseases did not consider the effect of the large-scale provision of ART in developing countries on the age distribution of the population and the future global need for the treatment of noncommunicable diseases. The failure of both meetings to consider the issue of HIV and aging underscores how little attention is being paid to this coming challenge.

Effectively addressing the needs of aging HIV-infected populations will require political will, strengthened health systems, a greater commitment of human resources, and improved clinical infrastructure and expertise.

Political will is needed to put the aging of the epidemic on political agendas worldwide, just as it was necessary before 2004 to mobilize governments and donors to commit to improving access to ART. Political pressure helped drive down the price of ART from more than $10,000 to less than $100 per person per year. Similar action could help address the current high cost of drugs for diseases occurring late in life, including many cancers and end-stage organ diseases such as congestive heart failure and renal failure.
The second major challenge relates to the way in which health systems in developing countries respond to the need for treatment of chronic noncommunicable diseases in HIV-infected patients. Both HIV infection and ART exacerbate a range of diseases that occur in older people, including cardiovascular disease, diabetes, and osteoporosis. In Africa, providers of HIV-related services are unable to meet the health systems challenges of caring for HIV-infected patients with other chronic diseases. Clinics that provide ART are typically minimally stocked with drugs other than antiretrovirals and rarely offer drugs that reduce modifiable disease risk factors (most notably, antiplatelet, antihypertensive, and lipid-lowering medications). Health maintenance through routine assessment of blood pressure, blood glucose levels, and cardiac function through clinical examination, as well as counseling and screening for common cancers, is often overlooked. Clinical visits for HIV care may be the only medical access that a patient has in many African countries. ART programs therefore ought to begin screening for coexisting chronic conditions and ensuring that patients have access to appropriate treatments. Yet few ART clinics can offer laboratory tests to detect risk factors for noncommunicable diseases and to diagnose cardiovascular disease, diabetes, and cancers; and treatments for common chronic diseases of old age are either not integrated into ART services or not available at all.

The third challenge — the need for adequate human resources —
Both HIV infection and antiretroviral therapy exacerbate a range of diseases that occur in older people, including cardiovascular disease, diabetes, and osteoporosis.

AIDS-free generation. This is indeed a laudable goal, yet we must also care for the millions of already-infected people struggling to obtain and cope with long-term ART while dealing with coexisting conditions. Recent modeling using South African data suggests that the average age of people taking ART will nearly double in the next 30 years, and the absolute number of similarly aged HIV-infected patients will triple in the same period.\(^6\)

The development of programs for aging HIV-infected populations in developing countries will thus be a critical medical and public health challenge in the near future. How it is addressed may well decide the long-term success of the global ART scale-up, one of the largest public health interventions in history.

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