Editorial

Time for Critical Care to Join the CDC's Universal HIV Screening Initiative?

By Peter E. Morris, MD

Despite the critical care community's involvement in the North American HIV experience, which began with the virus's first reports in the early 1980s, we rarely offer our patients in intensive care units (ICUs) the opportunity to be tested for HIV. Now, however, given renewed attention to reports from the Centers for Disease Control and Prevention (CDC), our colleagues in critical care may have another role to play in improving the health of patients: identification of their HIV status. This identification would be achieved through ICU-based universal offerings of HIV blood tests.

Guidelines that address HIV screening policies in health care settings were recently issued by the American College of Physicians (ACP).[1] The ACP statement recommends that clinicians adopt routine screening for HIV, that they encourage all patients to be tested, and that repeat screening be determined on an individual basis. This ACP statement was formulated after a careful appraisal of available guidelines on HIV screening policies, including an analysis of the previous guidelines from the US Preventive Services Task Force and the CDC. Issued in 2006, the CDC directive advocated a policy of offering universal screening for HIV to all patients aged 13 to 64 years in any health care setting.[2]

The CDC describes HIV infection as a worldwide health problem, estimating that 1.2 million Americans live with HIV/AIDS.[1,2] Of these, 25% have undiagnosed disease and are unaware of their HIV infection. Each year, at least 20 000 individuals are infected by others who are unaware of their positive HIV status.[3] Despite the existence of life-extending medications, one-third to one-half of HIV-infected patients in the United States are not receiving care.[1,4]

The critical care community deals with decisions that often require immediate action. Offering universal HIV testing is now recommended by the CDC—but theirs is not a request to contribute to disease prevention education. Unlike recommending a pneumonia vaccine to prevent pneumonia or recommending exercise to "prevent" coronary artery disease, the CDC is telling us that our patients have HIV disease and that we are missing it. None of us

doi: 10.4037/ajcc2009206

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would forgo an abnormality on a rhythm strip or fail to address low oxygen saturation. Equally important, we could be identifying HIV disease in our patients and helping them receive medications they need for this disease. The medical community as a whole is missing undiagnosed HIV patients and may not be seizing the opportunity to offer testing every time a 13- to 64-year-old patient presents for care, in whatever health care setting.

In the United States, an aspect of HIV epidemiology that calls out loudly for a change in screening policies is the unusually short time between many people's diagnosis of HIV and the onset of AIDS symptoms. Reports demonstrate that 38% of newly diagnosed HIV patients develop AIDS within the first year of diagnosis.[5] Because experts know that the natural course of HIV takes years from infection to the development of AIDS symptoms, the fact that 38% of those newly diagnosed also develop AIDS within 1 year means that many are unaware of their infection for years. It also means that these individuals are potentially transmitting HIV without knowing it.

With effective antiretroviral therapy, our notion of HIV as a disease has transformed from a rapidly fatal diagnosis to a treatable chronic condition.[6] There has been a dramatic reduction in the US death rate and an increase in those now living successfully with HIV.[1,6,7] Despite this incredible progress, the number of people with AIDS who die in the United States each year has reached a plateau of 17 000.

Much HIV mortality in the United States has been linked directly to late diagnosis and late initiation of appropriate antiviral therapy.[1,5,6] A harsh but compelling aspect of this statistic is that many of these patients likely had contacts with the medical system for various non–HIV related illnesses or health concerns in the years leading up to their diagnosis. Critical care is one of several areas of health care delivery in which medical care may be provided and contacts occur with undiagnosed HIV patients for their non–HIV related illnesses.

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Within the critical care areas, the potential target audience for the CDC's universal screening recommendation is not necessarily those patients who arrive at the ICU with a suspicion of HIV-related illness; in these patients we would ideally pursue an HIV test in current practice. In fact, the CDC's recommendation is to encourage HIV screening for *all people aged 13 to 64 whenever they come into contact with any medical setting.*[5] In critical care, we would effectively screen all patients falling within this age range. Such a shift breaks with previous recommendations that only those who fall within a high-risk demographic for HIV or present with an illness that could be linked to HIV receive such screening.

There are many reasons cited by the CDC to offer HIV screening universally for this age bracket. One is that risk-based testing has not been effective, particularly for preventing sexually transmitted HIV infection. The CDC defines high-risk individuals as injection drug users and their sexual partners, persons who exchange sex for money or drugs, sexual partners of HIV-infected persons, men who have sex with men, and heterosexual persons who have had or whose sexual partners have had more than 1 sexual partner since their most recent HIV test. Studies suggest that most people substantially reduce risky behaviors once they become aware of their HIV infection. A serious limitation to this approach, however, is that up to 25% of patients do not fall within the high-risk demographic on their initial positive HIV test.[4]

Universal strategies for HIV screening have been widely incorporated into the care of pregnant women and in protecting the blood supply. The CDC's shift from recommending screening only for high-risk persons to general screening is due in part to the success achieved with the practice of HIV screening among pregnant women. This approach, with its routine opt-out screening, has become accepted practice in the United States and has resulted in reduced mother-to-child transmission of HIV.

The CDC numbers translate into a call for action within many areas of health care, including critical care. The data tell us that of these 1.2 million US citizens with HIV, 500 000 are not receiving antiretroviral treatment and 250 000 are not even aware that they are HIV-positive.[8] How can we as critical care providers help address the problem that a large proportion of HIV-infected persons in the

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United States are unaware of their infection? These data inform us that HIV infection is being diagnosed much too late in the disease process for many people to fully benefit from available treatments.[8]

Health Care Settings Where HIV Is Currently Diagnosed

Although most HIV testing (44%) is conducted in the private setting, these account for only 17% of all positive tests.[8] Most positive HIV tests come from hospitals and emergency rooms (27% of tests) and from community clinics (21% of tests), where only 22% and 9% of the total tests were administered.[8] These findings indicate that much HIV testing in the United States is sought when care for other conditions (conditions not necessarily associated with HIV infection) is delivered. The CDC places this finding centrally in its call for universal testing recommendations for health care settings.

Universal screening recommendations are meant to change our approach and practice, making screening more commonplace and thereby maximizing our ability to reach those undiagnosed HIV patients much earlier in their disease course.[8]

Anticipating Potential Barriers

A real concern in applying the CDC's recommendations is that critical care patients are often unconscious or experiencing delirium for much of their stay, unlike in the outpatient setting where counseling can be offered and testing can be urged. In addition, we in critical care often must interact with our patients' surrogates to help with care decisions. The open discussion of a patient's HIV status in the outpatient setting would require the consent and participation of the patient. In the United States, various state laws exist regarding HIV disclosure.[9] Legal language describes under which circumstances health care professionals may discuss a patient's HIV status to the person acting as the legally designated surrogate. Medical professionals cannot discuss their patient's HIV diagnosis with the patient's family or friends unless the individual is the legal surrogate.

These limits on interactions can result in stressful situations for ICU care providers when they interact with an HIV patient's family and friends.[10] Despite such potential hurdles to the development of ICU-related HIV screening policies, the critical care community is strategically placed to make a significant contribution in efforts to diagnose HIV in the patients we serve.

Nurse-led HIV Screening

Success in broader HIV screening attempts has been limited both by our patients' inability to return for counseling and results after the test and by health care professionals' time limitations.[6] These barriers were recently addressed in a study concerning same-day HIV rapid testing (although false-positive rates with rapid testing have been high compared to more traditional testing), streamlined counseling, and nurse-initiated screening.[6]

These structures have been described as strategies to increase screening in outpatient settings. Streamlined counseling shortens counseling time, and nursing policies with order sets may allow for nurse-initiated HIV screening, thereby organizing HIV testing into the overall care priorities with regularity. Nurse-initiated screening has been shown to yield higher HIV testing and result receipt rates as compared to physician-initiated screening.[6] Because nurse-initiated HIV screening has been shown to be effective in the outpatient setting, it may have potential for the screening of critically ill patients.

The CDC recommendations to expand HIV testing in health care settings represent a call by HIV experts for all medical professionals to address ways to diagnose HIV infection in people who are currently unaware of their diagnosis. The shift to universal screening may enable people with HIV to have the earliest possible access to antiretroviral therapy. Ultimately, it offers an opportunity for those of us in critical care to contribute toward earlier and more complete HIV diagnosis of our 13- to 64-year-old patients.

Endnote: Introducing Our New Coeditor

Although our new nurse coeditor will speak for herself in her debut editorial in the May issue, it is my pleasure to introduce Cindy Munro, RN, PhD, ANP, FAAN. Dr Munro replaces longtime *AJCC* nurse coeditor Kathy Dracup, who retired at the end of last year. Dr Munro is a professor at Virginia Commonwealth

University and serves as an adult nurse practitioner on a volunteer basis at Petersburg Health Care Alliance in Virginia. Her unique experiences in front-line nursing and her scientific expertise in microbiology and immunology make her a valuable asset to the interdisciplinary mission of *AJCC*.

We enthusiastically welcome her to our team.

The statements and opinions contained in this editorial are solely those of the coeditor.

KEYWORDS: CDC, HIV, AIDS serodiagnosis, preventive health care, critical care, health screening

FINANCIAL DISCLOSURES
None reported.

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