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Permanent Supportive Housing for Homeless People — Reframing the Debate

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The persistence of homelessness in the United States has increased interest in providing permanent housing with supportive services to people with disabling conditions who have been homeless for more than a year. Skeptical about achieving political consensus on providing housing solely on humanitarian grounds, advocates for ending homelessness have increasingly turned to a financial argument, claiming that permanent supportive housing will deliver net cost savings to society by reducing the use of jails, shelters, and hospitals. But as researchers and clinicians who endorse such permanent supportive housing, we believe the cost-savings argument is problematic and that it would be better to reframe the discussion to focus primarily on the best way to meet this population's needs.

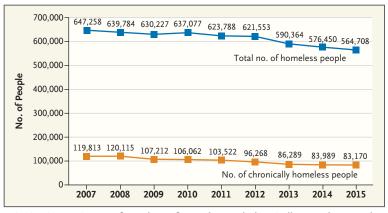
The Department of Housing and Urban Development estimated that more than 500,000 people in the United States were homeless in January 2015, about one seventh of them chronically homeless (see graph). The deprivations of homelessness, recognized as early as the Genesis story of Cain, are revealed starkly in contemporary research. Homeless people have higher rates of premature death,

a greater burden of acute and chronic physical health conditions, a higher prevalence of psychiatric and addictive disorders, and a higher risk of being sexually or physically assaulted than do people who have a home. Although delivery of health care services represents one component of a comprehensive response to homelessness, the growing recognition of housing as a social determinant of health calls for solutions that will prevent and end homelessness.

In 2010, the U.S. government endorsed the Housing First approach to permanent supportive housing as the preferred solution for chronic homelessness. Whereas other programs require people to engage in psychiatric or substance use treatment and attain stability and sobriety before they can receive housing, Housing First offers permanent supportive housing without these prerequisites. This approach bundles financial support for housing with offers of psychiatric, medical, and social rehabilitative support. Some Housing First programs use a "scattered site" model, providing subsidized rental support for a private-market apartment coupled with outreach from clinicians and social workers who regularly visit the tenant and assist as needed. Other programs use a "project-based" model, accommodating formerly homeless tenants in a building where comprehensive psychosocial services are available.

Studies in the United States and Canada have shown that Housing First interventions result in faster exits from homelessness and more time spent in housing than do traditional approaches.2 But fearing that reducing chronic homelessness would not prove sufficient to persuade policymakers or the public to invest in these programs, many advocates have sought to demonstrate cost savings. Anecdotal evidence, analyses using prepost designs, and a high-profile quasi-experimental study of Housing First for high-cost homeless people with alcohol use disorders offered the possibility of transcending political divides by suggesting that Housing First could save more money than it costs.3 This notion gained traction through lay-media articles based largely on unpublished, noncontrolled studies and on anecdotal reports such as Malcolm Gladwell's "Million-Dollar Murray" (http://www.newyorker .com/magazine/2006/02/13/ million-dollar-murray).

Higher-quality randomized, controlled trials, however, haven't demonstrated net cost savings.⁴



Point-in-Time Estimates of Numbers of Homeless and Chronically Homeless People, 2007–2015.

The largest trial of Housing First conducted thus far, the five-city At Home/Chez Soi study from Canada, reported a return of \$3.40 for every \$10 spent on housing participants with moderate needs. Among participants with high support needs, the return on investment approached cost neutrality but fell short of the net savings forecast by lower-quality studies.

There are several possible explanations for this discrepancy. People who are high users of health care services one year tend to reduce their service use the next year.5 When pre-post studies lack a strong comparison group, this regression to the mean may be inappropriately attributed to the intervention. In addition, early Housing First studies targeted the homeless people who were most costly to society - those at the high-end tail of the cost curve. Even with an adequate control group, there is more room to reduce costs for the most costly than for people with lower service use who account for the majority of chronically homeless people in the United States. Indeed, in the At Home/Chez Soi trial, net cost savings were achieved only among participants in the highest decile of baseline cost. As a result, staking the future of Housing First on the expectation that it will save

money could undermine efforts to deliver an effective intervention to the majority of the population it's intended to serve.

Although some advocates may see these findings as disappointing, we believe they present an opportunity to reconsider the problems inherent in applying a costsavings outcome metric to Housing First. First, creating expectations of cost savings imposes a double standard. In general, there's no expectation that health and social services save money. Instead, we invest in treatments, programs, and services that deliver benefits at an acceptable cost, often judged on the basis of quality-adjusted life-years gained. Insisting on net savings from Housing First programs implicitly devalues the lives of homeless people.

Second, a focus on savings could overshadow other metrics of success and imply failure when Housing First programs achieve their primary aim but don't produce net savings. Finally, overemphasizing the cost dimensions reduces a complex social situation to a financial calculation. Advocates and researchers shouldn't proceed from a view that Americans are so uncaring that they will support responses to homelessness only if they deliver net monetary gains. A persuasive and

more sound argument favoring Housing First would instead draw from scientific research, economic considerations, and moral values.

From a scientific perspective, high-quality studies have shown that Housing First is superior to usual care in promoting residential stability, with clients being housed for 65 to 85% of the subsequent 1 to 2 years, as compared with 23 to 39% among people randomly assigned to receive usual services.2 Although selected studies have shown benefits for HIV control and alcohol use, several trials have found no significant improvements associated with these programs in terms of other health status indicators. However, health effects represent a relatively new area of inquiry, with the longest trials including just 2 years of follow-up. Interventions targeting social determinants of health may require more time and sustained investment to effect meaningful changes in health outcomes.

From an economic perspective, Housing First's failure to attain net cost savings shouldn't obscure its relatively low cost. Depending on the context and service package, Housing First programs often cost \$8,000 to \$18,000 per year of housing. Returns on investment include partial offsets in the use of emergency medical and judicial services and the creation of a more livable community and a more welcoming space for commercial development. If we can countenance figures of \$100,000 to \$150,000 per quality-adjusted life-year for selected medical interventions, then the cost of successfully housing vulnerable people escaping chronic homelessness should be within reach.

From an ethical perspective, Housing First upholds the human right to housing articulated in Franklin D. Roosevelt's "Second Bill of Rights" and solidified in the United Nations Universal Declaration of Human Rights. It also resonates with the tenets of nearly every religious tradition in prioritizing care and hospitality for poor and vulnerable people. It aims to fulfill a collective responsibility to account for and remedi-

An audio interview with Dr. Kertesz is available at NEJM.org

ate the incongruity of persistent homelessness in one of

the wealthiest countries in the world. We believe that Housing First, coupled with efforts to prevent more people from becoming homeless, represents the best possible expression of what Abraham Lincoln characterized as "the better angels of our nature."

Housing First may generate net savings in highly selected instances, but its widespread implementation will not. Although financial arguments were important in introducing it into mainstream policy discourse, the problems with such arguments now threaten to undermine efforts to end homelessness. We believe it's time to move toward a more balanced discussion of the many features of Housing First that make it a scientifically sound, economically reasonable, and ethical approach to addressing chronic homelessness.

The views expressed in this article are those of the authors and do not necessarily reflect those of the Department of Veterans Affairs.

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FOCUS ON RESEARCH

Clinical Genomics — Molecular Pathogenesis Revealed

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The case report by Punwani et al. in this issue of the Journal (pages 2165–2176) is an exciting example of recent achievements in the application of contemporary molecular genomics to clinical medicine, especially with regard to congenital diseases. It also provides a glimpse of what clinical genomics will look like in the decades ahead, as medicine becomes increasingly based on genetics.

The newborn boy in this case had a severe neurodevelopmental disorder involving hypotonia, spastic quadriplegia, and seizures. At birth, a screening assay involving T-cell-receptor excision circle (TREC) quantification showed that he was likely to have a primary immunodeficiency. Immunophenotyping confirmed that he had se-

vere combined immunodeficiency (SCID) with T-lymphocyte deficiency but normal B and natural killer lymphocytes (T–B+NK+). This analysis permitted swift intervention with hematopoietic stem-cell transplantation (HSCT), which reversed the severe immunodeficiency but not the neurodevelopmental abnormalities.

This study reflects remarkable advances in molecular diagnosis, but it also illustrates that full implementation of clinical genomics still has a long way to go. The TREC screening assay for severe immunodeficiency exploits a molecular idiosyncrasy of T cells. The T-cell antigen receptor expressed in each T cell is assembled from gene products that do not sit side by side in the genome. To bring

the right gene segments together, rearrangement during ontogeny excises nonreplicating DNA circles, and thus provides an accurate biomarker of active thymopoiesis. The assay uses DNA from dried blood spots (collected by state health agencies for newborn screening), from which TRECs can be quantitated by powerful DNA polymerase-chain-reaction analyses.

Efforts by Puck, an author of the current case report, have led to widespread adoption of the TREC assay for newborns. It permits rapid diagnosis of SCID, which prompts immediate intervention to prevent infections and potentially permits early definitive cure by HSCT, ultimately reducing mortality from SCID. However, the information supplied by the assay is