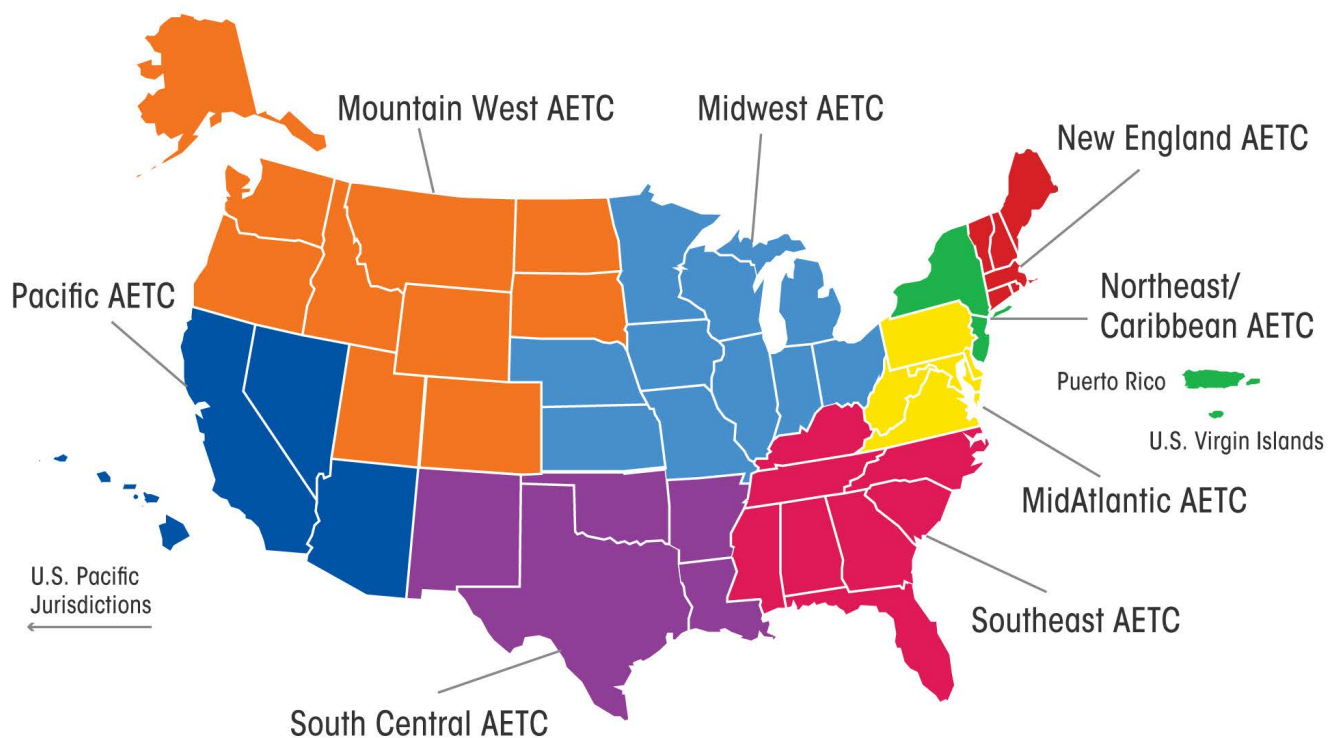


Strengthening the HIV Workforce

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Strengthening the HIV Workforce

Executive Summary

Over the past few decades, shifts in healthcare in general as well as in the nature of HIV care have put substantial stress on the HIV workforce. The workforce is strained at every level from pre-novice to expert. Insufficient numbers of students are entering STEM fields in college and persisting through graduation. A plethora of factors have been documented to impact practicing professionals. The expert workforce, particularly trained in infectious diseases, is shrinking. These influences are exacerbated in some areas of the U.S., especially in the Southeast where risk factors for HIV are highest. Complicating care in the Southeast include persistence of stigma, high rates of poverty, poor health infrastructure, magnified health disparities, and insufficient numbers of primary care providers.

In light of those issues, the Health Resources and Services Administration (HRSA) has highlighted the need for comprehensive strategies to ensure a healthy pipeline bringing sufficient human resources into the system as well as maintaining those who enter, across disciplines, to address the plethora of healthcare needs of persons living with HIV (PLWH). Regional AIDS Education and Training Centers (AETCs), funded by HRSA as a component of the Ryan White HIV/AIDS Program, are in a unique position to play a major role in addressing the HIV workforce issue as they are charged with training pre-novice to expert HIV healthcare professionals across disciplines to counsel, diagnose, treat, and medically manage PLWH, and to help prevent high-risk behaviors that lead to HIV transmission.

The purpose of this report is to synthesize current literature, provide examples of model programs and practices, and offer recommendations related to strengthening the HIV workforce, particularly in the Southeast region. Using a multidisciplinary lens, we explore workforce capacity issues, from novice to expert, related to

Building the Pipeline, Capacitation, Collaboration, and Retention.

Building the Pipeline

Attracting and hiring new professionals will require comprehensive and multidisciplinary approaches. We explore issues related to marketing, recruitment, mentoring, and research exposure, and then consider pre-college, college, and post-graduate phases of education and training. A cross-cutting issue is the difficulty engaging underrepresented minority students and professions to health and HIV-related health professions. The workforce does not mirror the population of PLWH, regarding many issues including race/ethnicity, and economic status, among other characteristics, particularly in urban areas. While this is influenced by multiple reasons, particular attention to attracting underrepresented minority persons to the workforce is critical as is developing cultural competency skills across the entire workforce. We offer recommendations that include creating a position dedicated to workforce development, nurturing partnerships between schools/colleges, and providing opportunities for mentorship at numerous points in school and early career.

Capacitation

The general healthcare as well as HIV workforce stressors mentioned previously impact training of the current HIV workforce. Moreover, as the nature of HIV care has and continues to shift so dramatically, the implementation of best practices in HIV care among practitioners currently in the workforce has not kept pace with the research. In a recent study, providers in the Southeast showed greater deficiencies relative to practitioners in other regions of the U.S. Increased focus is needed on issues related to shifts in HIV care to primary care settings, complexity related to patient comorbidities, cultural competency in healthcare delivery, and men-

-torship opportunities. We offer recommendations that include providing access to a variety of training programs, promoting instructional best practices among trainers and facilitators, and supporting experts in the field as mentors to novice professionals.

Collaboration

In order to deliver high quality healthcare to PLWH, collaboration across medical and allied healthcare practitioners is essential. In addition to disease management, professionals are needed to provide social, financial, mental health, and logistical support for PLWH. Personal characteristics, comorbidities, and contextual factors can complicate HIV care. Further, identifiable subpopulations of PLWH are more difficult to engage in prevention, screening, referral, and treatment. We offer recommendations that include training testing providers to offer more active referrals following an HIV diagnosis, establishing dedicated case management professionals who have responsibilities for establishing linkages across systems and providers, and cultivating and recruiting PLWH as peer mentors for others within their community.

Retention

Developing and maintaining a strong workforce requires careful attention to the factors that impact job satisfaction. Given that the satisfaction, morale, and stress-levels of healthcare providers have been shown to have an impact on patient reported quality of care, attention to job satisfaction is warranted although research on this topic in HIV care specific contexts is limited. Personal factors such as burnout and organization factors such as culture and climate are important. We offer recommendations that include creating more intentional opportunities for career development, professional networking, and mentorship; fostering a workplace culture of self-care to prevent burnout; and ensuring there are mechanisms for employee feedback and organizational quality improvement.

Strengthening the HIV Workforce

Introduction

Introduction

The mission of the AETC Program is to increase the number of healthcare professionals who are educated to counsel, diagnose, treat, and medically manage people living with HIV (PLWH), and to help prevent high-risk behaviors that lead to HIV transmission.¹ Funded by the Health Resources and Services Administration (HRSA) within the U.S. Department of Health and Human Services, the AETC program is an essential component of the Ryan White HIV/AIDS Program which, since 1990, has supported a comprehensive system of care for PLWH who are uninsured or underinsured. The program supports a network of eight regional centers and three national centers to provide education and training. The Southeast AIDS Education and Training Center (SE AETC) serves the HIV/AIDS educational needs of health care providers in Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee. The SE AETC is based at Vanderbilt University Medical Center and works in coordination with the Vanderbilt Comprehensive Care Clinic.

In order to accomplish the goal of increasing the size and skills of the HIV clinical workforce, HRSA has highlighted the complexity of issues and thus the need to address intentionally pre-novice to expert learners who may in the future or currently comprise the workforce. Comprehensive strategies are needed to create a pipeline to bring sufficient human resources into the system, across disciplines, to address the plethora of healthcare needs of PLWH who are served across healthcare settings. There has been national attention to the shortage of STEM professionals in general, stimulating an abundance of educational initiatives designed to increase secondary and college students' persistence in science disciplines. In addition, there is considerable need to continue to develop providers with stronger skills and particularly expert providers who can support practice transformation efforts to improve patient outcomes along the HIV care continuum by integrating principles

of the patient-centered medical home model and integrated HIV care and behavioral health services.

Trends in Healthcare

Shifts in healthcare in general have major implications for HIV care. Population growth, aging across the population, and greater racial/ethnic diversity place greater stress and burden on the HIV workforce.¹⁸ Further, financial disincentives have challenged primary care broadly, and particularly HIV care.¹⁸ Yet, in general, for more than a decade, provider reimbursement rates have declined. The current system tends to reward providers for procedures rather than primary care.⁹ Relatively speaking, reimbursement rates for HIV treatment are very low and often do not cover the full cost of providing HIV services. In fact, low reimbursement rates have been cited by providers as one of the biggest challenges in recruiting and retaining HIV clinicians.¹³⁻¹⁵ In addition, there are indirect costs associated with HIV care (e.g. administrative and data reporting requirements), which have increased in recent years. This administrative burden contributes not only to concerns of financial sustainability for clinics and health organizations but also reduced job satisfaction for providers.¹⁶

Over the last few decades, the nature of HIV care has changed dramatically. Highly active antiretroviral therapy (HAART) introduced in the late 1990s has fundamentally shifted HIV from a terminal illness to a chronic condition. In addition, HIV prevalence and incidence continues to climb with 30,000 newly diagnosed PLWH annually.¹¹ Because PLWH are now often diagnosed younger and earlier and living longer, the complexity of their healthcare needs has grown. A wider range of services is now needed to address comorbidities (e.g., mental illness and substance abuse) and aging (e.g., diabetes, heart disease).

As a result of these shifts, primary care settings have become more integral to the HIV system of care.⁶⁻⁷ Now

more than half of HIV care is provided by generalists, most often internal medicine and family practice physicians.⁹ Three-quarters of PLWH receive care from Ryan White funded healthcare providers.

Impact on the HIV Workforce

A growing body of literature over the past decade has identified a growing crisis in the HIV workforce. A study from 2013-2014 predicted that the “projected workforce growth by 2019 will not accommodate the increased number of HIV-infected persons requiring care.”¹¹ A number of factors contribute to this crisis, including: the impending retirement of large numbers of practitioners;⁴ decreasing engagement in HIV care on the part of pre-novice and novice practitioners;² and large scale shifts in the U.S. healthcare system and medical insurance.⁸ For example, the Infection Disease Society of America (IDSA) Education and Research Foundation Annual Report for 2015 noted that “the ratio of applicants per ID fellowship positions decreased from 1.2 in 2008 to 0.7 in 2015.”² Data from a large study by the American Academy of HIV Medicine (AAHIVM) in 2009 suggested that nearly one-third of currently practicing HIV practitioners will stop practicing in the next ten years.⁸ Practicing providers cite issues such as “increasing non-patient care responsibilities, decreased support staff, and increasing administrative burden”¹ as regular barriers to care provision. Numerous studies suggest that low rates of reimbursement and low pay-scales are primary deterrents for new providers, especially for students with school debt.^{9, 10} In light of these intersecting issues, clinics, particularly in the Southeast, are finding it difficult to recruit and retain practitioners.

The Southeast

The Southeast U.S. is disproportionately impacted by HIV, and in fact, the geographic disparities in HIV outcomes (e.g., mortality) are widening.¹⁹ The Southeast has the highest rates of HIV diagnosis, lowest survival rates, and greatest numbers of PLWH relative to any region in the U.S.²⁰ The Southeast region contains about one third (37%) of the U.S. population but about half (49%) of the individuals diagnosed with HIV.²¹ These healthcare disparities are not limited to HIV and include the highest rates of STD infection, obesity, heart disease, and diabetes, among others.²²

The South has high rates of poverty and disability and greater numbers of individuals without a high school degree.²³ It also has the highest number of persons with-

out insurance.²⁴ Further, the South has higher proportions of race/ethnic minorities than other regions and the highest proportion of African Americans.²³ While there have been remarkable declines in HIV mortality over the past decade, gaps in health outcomes are actually widening for minority and economically disadvantaged populations, particularly for African American PLWH.¹⁹ The Southeast also faces a greater burden related to other known social determinants of health (i.e., characteristics of the social environment that influence individual/community health). The Southeast includes a vast geographical area with many rural areas and transportation issues. Further, HIV-related stigma is a major concern in the region.

In addition, the health care infrastructure in the Southeast is significantly challenged. There is great variation across the region's healthcare delivery systems with many areas being under-resourced. The South suffers from a lack of qualified health providers^{3,5} including the fewest numbers of primary care practitioners nationwide.²⁵ These challenges impact the provision of care to PLWH as well as the recruitment and retention of providers.

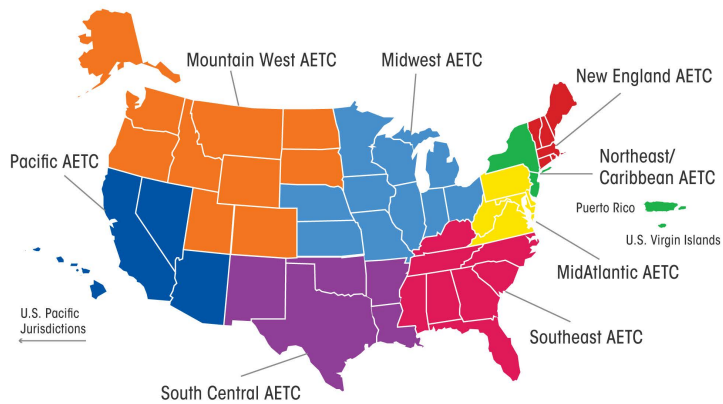
Overview of this Report

This report emerges from a collaboration between the SE AETC and Peabody College at Vanderbilt University. The purpose of this report is to synthesize current literature on issues impacting the HIV workforce in the United States, with special attention to strategies for application in the Southeast region.

Using a multidisciplinary lens, this report explores opportunities to increase workforce capacity of pre-novice to expert providers in four segments: Building the Pipeline, Capacitation, Collaboration, and Retention. Each section includes an introduction, a review of recommendations and strategies, and model programs and practices. We utilize principles of talent management which emphasize a strategic commitment to hire, manage, and retain a talented workforce. The principles and practices are situated within the particular context of the HIV workforce.

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Building the Pipeline for the HIV Workforce

KEY POINTS

Introduction to Building the Pipeline

The focus of this section is impacting pre-novice entry into the HIV workforce. We suggest that attracting and hiring new professionals will require comprehensive and multidisciplinary approaches in four areas: marketing, recruitment, mentoring, and research exposure. Additionally, we suggest that these topics should be addressed during multiple stages of career decision-making; thus, we focus on pre-college, college, and post-graduate education. This section provides targeted recommendations for each. Finally, because literature emphasizes the need for more professionals from underrepresented minority (URM) backgrounds, we focus on strategies to attract and support URM students into the HIV workforce.

Practitioners from Underrepresented Minority Groups

Although PLWH come from many racial and ethnic backgrounds, the makeup of the workforce currently does not mirror their diversity, particularly in large urban areas. According to data from 2013-2014,* 63% of the workforce is white, 11% black, 11% Hispanic, and 16% other races.²⁵ Research demonstrates that patients are much more likely to evaluate the care they receive as excellent when the provider shares their racial background.¹⁶ Further, research has demonstrated that bilingual care (where applicable) helps Hispanic patients stay in care and generates favorable treatment outcomes including suppressed viral loads.¹⁵ Therefore, it is essential to increase the diversity of the workforce. However, URM students and professionals face unique barriers to entering the workforce. For example, studies have shown that students of color face significant barriers, including limited knowledge of training options, lack of early research socialization processes, late engagement with grant writing, lack of mentoring experiences, and direct/indirect experiences of racism.¹²

*Based on a probability sample of HIV care providers, defined as physicians, physician assistants, and nurse practitioners who had completed training and provide HIV care.

The U.S. is facing a severe shortage in the HIV workforce.

The current HIV-care workforce is predominantly white.

Strategic steps to improving the workforce pipeline include:

- marketing the need for more HIV-care professionals;
- recruiting underrepresented minority (URM) students;
- establishing structures of mentorship; and
- exposing student to research opportunities.

Recommendations include:

- create a position dedicated to workforce development;
- nurture partnerships between K-12 education system and institutions of higher education; and
- provide opportunities for mentorship at numerous points in school and early career.

Truly addressing the workforce shortage will require targeted support for URM students and professionals in overcoming these systemic barriers.

Marketing

Increasing awareness about HIV care is a critical step in developing the talent pipeline. Raising awareness should include stronger articulation of the epidemic in the U.S., especially in the Southeast and other places with provider shortages; clear statements of available opportunities; and emphasis of the rewards of HIV care for providers. Increasing awareness of the HIV workforce shortage at pre-college, college, and post-graduate levels is imperative. Opportunities for educational programming include partnerships with public high schools to expose young students to new careers that impact their futures, research opportunities during college propel students into further education and trainings in professional settings support career transitions and new skill building.

Recruitment

A strategic recruitment plan first identifies available positions, then communicates the vision, mission and opportunities to potential employees. To be effective, a recruitment strategy will likely require a career center dedicated to identifying employment needs and sourcing appropriate candidates. This recruiting strategy should target students in the college and post-graduate stages. An effective college recruiter will “build, develop, manage and maintain campus relationships.”¹² In the professional sphere, recruitment strategies should focus on “preparation, execution and a clear understanding of hiring objectives.”¹⁸

Mentoring

Studies have shown that mentoring during education and early career is a key predictor of entering the HIV field.²⁻⁶ Mentoring is particularly important for persons from URM backgrounds who face unique challenges, such as systemic barriers to funding, isolation, and racism.³ The importance of mentoring has been noted at various levels of education and career, emphasizing that both students and early professionals are more successful with mentorship opportunities. Mentoring can also be used as a recruitment incentive, emphasized as a reward of the work.

Research Exposure

Early exposure to research increases an individual's

likelihood of pursuing a career in HIV care.⁵ These experiences impact both education and employment decisions, as well as skill building and professional capacitation. These programs, during pre-college, college, and post-graduate settings, may include academic enhancement and apprenticeships,⁸ often leading to supportive relationships and mentoring. This is especially important for pre-college students who face structural barriers to matriculate to collegiate health science programs.

Marketing, recruitment, mentorship and research exposure work in tandem to strengthen the workforce pipeline, reinforcing each other through significant relationships and experiences. The remainder of this section provides recommendations for strengthening pre-college, college, and practicing professional educational opportunities.

Pre-College

Research has shown that “the leaky STEM pipeline” extends as far back as elementary school. The middle grades in particular are crucial for instilling a positive perception of STEM coursework and careers and supporting students' self-efficacy in STEM.³³ Once students shy away from STEM subjects as they progress through school, it is unlikely that they will pursue STEM majors or careers in the future given the demands of STEM coursework. There has been increased efforts nationally to strengthen K-12 science standards and STEM literacy. Partnerships among schools, business, community organizations, and higher education institutions have been a popular strategy to bolster the pipeline of students entering STEM majors in college.³⁴

Strategies/Recommendations

Increase the number of partnerships with public school districts and community-based organizations to bolster enrollment in pipeline programs, especially for URM students. These partnerships can also provide creative ways to introduce students to a variety of industries and increase their awareness of future career opportunities. School career centers and school counselors play a pivotal role in this process, as they help students envision and navigate school decisions about their future. Connecting with guidance counselors to recruit particular students spreads awareness about the field and provides opportunities to explore the field during this early

stage of career development.

Expose pre-college students to STEM earlier in their academic career. This can happen as part of their school course load or as extra-curricular opportunities. It is important to build partnerships with practicing professionals to increase mentorship opportunities for pre-college students to support their matriculation into higher education and ultimately the HIV workforce. This is an important piece of marketing, as it increases awareness at an early age and encourages participation in the field. These partnerships should seek to include professionals from URM backgrounds.

Example Programs

The Stanford Medical Youth Science Program (SMYSP) is a five-week residential pre-college pipeline program for low-income and URM high school students in California to bolster and diversify high school students' interest in and engagement with the medical profession. Of the 405 students who have completed the SMYSP, 99% have been admitted to college and 81% have earned a 4-year degree. Among the college graduates, 52% are attending or have graduated from medical or graduate school.⁸

The California SEM (science, engineering, medicine) high school study follows high school students and their likelihood to persist in science aspirations. Those who found solid support for science through mentorship, exposure, research opportunity, and other means, were most likely to persist. The persisters actively participated in extracurricular hands-on activities in their communities, and were able to interact with professionals in the field. Ultimately, students sense of self-efficacy in science was raised as they discovered passions and abilities in the STEM fields.⁷

The School for Science and Math at Vanderbilt (SSMV) is a joint venture between Vanderbilt University and Metropolitan Nashville Public Schools that offers high school students research-centered learning experiences in the hopes of connecting a STEM curriculum with hands-on experiences to raise awareness and interest about pursuing STEM majors in college and ultimately in their careers. Partnering with local businesses, non-profit agencies, and higher education institutions, the SSMV prepares its participants to engage in a collegiate curriculum and establish a solid foundation for career success. This program is free for qualified students who maintain certain levels of excellence in their high

schools as well as the SSMV courses.¹⁰

College

During college and professional school, individuals choose careers and join professional organizations. This is a highly formative time in which life-long relationships are formed and the career trajectory is begun. Research shows that the STEM pipeline is impacted by many factors that contribute to individuals entering STEM fields (e.g., college readiness, access to higher education opportunities, choice of STEM major, academic success and persistence, and graduation). Several strategies have been shown to address these factors thus contributing towards strengthening the pipeline especially for minority students. These include mentoring, research experience, tutoring, career counseling, and financial support.²⁹ Research experiences in particular are effective and have been shown to increase the odds of students pursuing post-graduate degrees.^{30,31}

Strategies/Recommendations

Connect college students to research opportunities and mentors in order to expose them to the field of HIV. These experiences are pivotal moments in students' career decision-making process. Research opportunities, which also provide access to mentoring, can happen through coursework, extra-curricular activities, and collaborations among multiple institutions. Ensure students are aware of these opportunities and utilize recruiting strategies suggested by the Collegiate Employment Research Institute.²³⁻²⁴ Provide funding as needed to make sure students have access to these opportunities and are not limited by resources.

Example Programs

A number of college-based research and mentoring programs exist, such as **Summer Research Opportunity Program (SROP)**,⁶ the **Summer HIV/AIDS Research Program (SHARP)**,⁵ **Research Initiative for Scientific Enhancement Program**,¹² and **Initiative for Maximizing Student Diversity Program**.¹² The programs have supported student development in building professional networks, securing funds for research, influencing career aspirations, and developing relationships with professionals of their same racial/ethnic group,⁶ as well as increasing self-efficacy and identity formation, fulfilling professional expectations such as manuscript writing

and presentation, and increasing intentions to pursue further education.⁵ The SHARP program also implements a team-based approach to mentoring that may be replicated at other institutions.⁵

Innovative research collaborations exist between historically Black colleges and universities (HBCUs) and large medical schools and provide research opportunities for students of color.¹⁴ These partnerships provide additional opportunities to URM students, as well as influence and inform research conducted at predominantly white institutions. These collaborations also support multiple kinds of mentorship, as URM students form connections at their HBCUs and at medical schools.

Post-Graduate

Recent graduates, often carrying a heavy load of education debt, are embarking on their career trajectory. This stage is another key opportunity to strengthen the pipeline through recruiting practices and strategic career placements. Effective mentoring programs are particularly helpful in facilitating progression through the pipeline, especially for minority graduates entering the workforce. Mentoring programs need to be better designed and integrated into the sociocultural context as well as enhanced by involving communities in research.³²

Strategies/Recommendations

Focus on recruiting new graduates into HIV care in under-served areas. Develop active talent management and recruiting strategies that include targeted job descriptions, employee referrals, social media promotion and recruitment, and connections to professional organizations. Incentivize new graduates to high need areas and support their transition. Paying adequate attention to these important issues of recruitment-- geographical location and financial compensation-- is important for strengthening the pipeline.

Develop a mentoring structure that connects novice professionals with experts in their field. Studies show that mentoring connections made early are most effective.¹⁹ Given that many professionals from URM backgrounds are provided with less opportunities for mentoring, a formal mentoring structure is critical to career success.

Ensure that mentors are trained in cultural competency and can be supportive to their mentees. Mentoring structures are explained further in Section 2: Capacity.

Example Programs

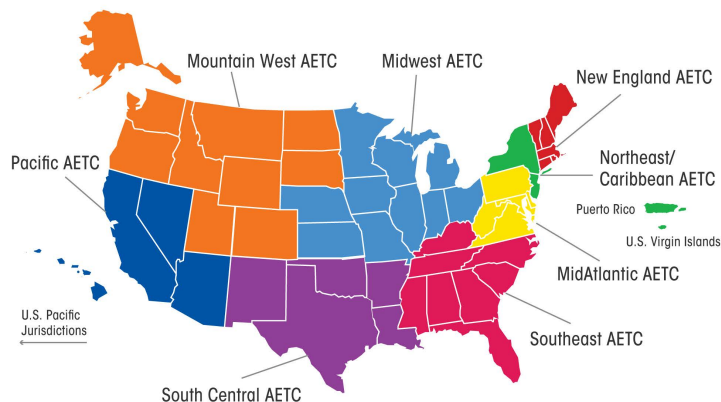
Recruiting programs designed to strategically incentivize and place new graduates in under-served areas, help place providers where needs are the greatest. The **Teach for America (TFA)** model, successful in the field of education, has been replicated in the medical field to recruit healthcare professionals to HIVCorps (recruiting HIV providers internationally)¹³ and Health Leads (recruiting professionals for public health).²⁶ Health Leads relies on competitive recruitment and cohort teams to build their workforce.²⁷ “Just as TFA has created a cohort of current and former teachers committed to public education and social change,” foundation executive Samberg noted, “Health Leads imbues its advocates with a clear sense of the relationship between poverty and health and with the skills to tackle obstacles standing in the way of solutions.”²⁶

The **National Service Health Corps Loan Repayment Program** provides medical students with up to \$120,000 to repay their loans in exchange for a three-year commitment in approved Health Professional Shortage areas. Numerous studies have suggested that financial burdens, such as high loans or low salaries, disincentivize students from entering the field of HIV.²⁶

The **HIVMA Clinical Fellowship Program** seeks to increase the number of providers practicing HIV medicine with underserved populations. The one-year mentor-based program is designed as an in-depth training program for new physicians, providing a year of dedicated learning to strengthen their clinical experience. The award includes a \$60,000 stipend.²²

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Capacitating the HIV Workforce

KEY POINTS

Introduction to Capacitation

This section examines the primary components of capacitating (training, equipping, and resourcing) the HIV workforce. Studies have shown that much of the workforce is underprepared to adequately care for PLWH. The Black AIDS Institute reported that practitioners currently in the HIV workforce lack adequate, up-to-date scientific knowledge. When surveyed, only 63% of respondents accurately responded to general HIV-related scientific knowledge. Practitioners in the South scored on average two points less than the national average.⁷ Georgia and North Carolina had the second (59%) and third (57%) lowest scores overall.⁷ In 2016, a convergence of factors create a unique set of challenges for the HIV healthcare workforce.

Recent shifts of HIV management to primary care settings means that general practice physicians need training and resources to equip them to care for this new patient group.^{2,9} Advances in drug technology mean that PLWH are living longer than ever before, which makes them more likely to experience comorbidities.¹⁰ Training and support is required to help providers manage these complex conditions and deliver expert care. While the population of PLWH is incredibly diverse, that diversity is often not mirrored in providers, creating a lack of cultural competency, which negatively impacts patient care.¹¹ Additionally, many of the HIV specialists who joined the workforce in the early years of the epidemic are now retiring. As they retire, there will be a vacuum of expert providers in the HIV care workforce who can serve as mentors. Therefore, new mentorship structures must be established to ensure that general practice professionals receive support as they navigate the complexities of HIV care.

Given these realities, cultivation of a well-trained and culturally competent HIV provider workforce* is critical to the care

* This section is primarily focused on equipping the workforce within the primary care context, however training the different fields of the HIV workforce are explored further in Section 3: Collaboration.

HIV care is shifting to a primary care context and requires new skills from the workforce.

Strategic steps to capacitate the workforce include:

- supporting primary care providers to care for PLWH;
- equipping the workforce to treat the comorbidities of PLWH;
- improving cultural competency of current providers;
- developing a formal mentorship structure; and
- ensuring that training programs incorporate educational best practices.

Recommendations include:

- provide access to a variety of training programs and promote instructional best practices among trainers and facilitators;
- equip training facilitators to lead interactive modules on how to deliver culturally competent care; and
- train experts in the field to become mentors to novice professionals.*

of PLWH. Increasingly, training needs of the medical workforce include capacitating primary care providers, comorbidity management, cultural competency, and mentorship through effective training programs.¹

Shifts to Primary Care

The expansion of insurance benefits brought on by the Affordable Care Act (ACA) increases the likelihood that federally-qualified health centers and primary care doctors will be called on to treat PLWH. From counseling to testing, diagnosis to care, managing the HIV epidemic in 2016 requires support from healthcare professionals who have much less experience providing HIV care. In order to train new HIV care providers to deliver high quality, comprehensive HIV testing and care, it is essential that they receive frequent and effective training on best practices in care and gain the support of seasoned HIV specialists through mentorship programs.⁸⁻⁹

Comorbidities

As the science of HAART and HIV treatment improves, the average lifespan of PLWH increases and the size of the PLWH population in the United States grows. The current population of PLWH in the United States is larger than it has ever been. Longer life expectancies for PLWH mean that patients are more likely to experience comorbidities. In order for primary care, HIV specialists and other physicians to gain knowledge on how to treat PLWH over the life course, it is essential that training and a suite of resources for comorbidity management be made available.¹⁰

Cultural Competency

Culturally competent care occurs when a provider carries out his or her function in a way that respects the cultural and individual identity of the patient.²⁸ Although culturally competent care is critical to the overall efficacy of HIV care, it is especially important when providers deal with patients from historically disenfranchised groups.²⁸ A large body of research demonstrates that favorable clinical outcomes are closely linked to provider trust, cultural competence, and ability to deliver bilingual care when needed.¹⁶ The absence of cultural competency in HIV care has been noted as a barrier to patient retention, among other barriers.¹⁶ In light of the racial and ethnic differences between PLWH and their providers,²⁴ training in cultural competency is especially important for providers along the continuum of care.¹¹

Mentorship Training

In spite of the clearly documented value of mentoring, a number of challenges prevent a robust mentoring structure, including time conflicts, funding limitations, geographical distance, communication struggles, and lack of training for potential mentors.¹²⁻¹⁴ For investigators and faculty of color, unique challenges to mentoring create difficult and exhausting decisions. For example, faculty of color are often called on to fill numerous committee roles, promoted less than their white counterparts, expected to be the cultural experts in their department, poorly compensated for their service, and forced to choose between completing tenure requirements and mentoring students.¹⁵ Further, most mentoring relationships are developed in an ad hoc manner, without the support or accountability of a formal mentoring structure.¹⁴ According to Forsyth et al. (2009), a strong mentoring structure, supported by institutional administration, should include consistent funding for meetings, training and research, well-funded collaborations between research institutions and minority-serving institutions, data collection for assessing the success of mentoring programs, a prioritization of mentoring time by advanced faculty, and the development of a mentoring-friendly culture, which provides both opportunity and support to mentors and mentees, especially to those from underrepresented backgrounds.¹²

Effective Training Programs

Effective, accessible, and targeted training programs across the continuum of care are key to capacitating the workforce. According to Boehler et al. (2015), "Provider education and training has been shown to improve clinicians' HIV knowledge, skills, and practices" and "interactive and mixed-method education programming and mentoring over time" have the best results.¹⁶ Studies have also shown that longitudinal, on-site training programs can be effective in changing self-reported practices of providers, when facilitators are able to orient training sessions to the unique needs of individual centers and utilize active learning theories.¹⁷

Strategies/ Recommendations

Increase the capacity of all providers, in specialty and primary care settings, to deliver high quality, culturally competent HIV care. Leverage training opportunities to include cultural competency modules and increase the number of providers able to deliver bilingual care when needed. Consider innovative ways to infuse experiential and reflective practices drawing on the prin-

ciples of adult education to strengthen practitioners' cultural competency skills.

Utilize distance learning and in person training to ensure the HIV workforce receive up to date information on regulations and best practices for care.

Create opportunities for mentoring and collaboration between novice professionals and experts in the field to facilitate critical knowledge sharing; ensure that mentors are trained and equipped to provide effective mentorship.

Develop platforms for sharing tools for management of comorbidities to deepen HIV care provider understanding of managing the complex conditions.

Strengthen training materials and delivery to ensure content is provided using instructional best practices. Learning outcomes are improved when training supports (1) active learning, (2) instructional tailored to the learner, (3) scaffolding to move the learner from novice to expert, (4) social interaction and communities of practice, and (5) formal opportunities for introspection and reflective practice.^{24,29}

Example Programs

The University of Washington and the AETC National Coordinating Resource Center are currently developing an **online curriculum for training a broad range of HIV healthcare professionals**, to be launched in early 2017. The curriculum will include information on up to date federal care guidelines, expert opinion information, and cultural competency content. The format of the online curriculum is being designed based on theories of adult learning. As a self-guided learning platform, the resource will track provider progress and give opportunities for feedback. The content of the National HIV Curriculum will include: (a) screening and diagnosis, (b) basic HIV primary care (c) antiretroviral therapy, (d) management of co-occurring conditions, (e) prevention of HIV and (f) special populations.⁹

The International Association of Providers of AIDS Care (IAPAC) created an **online learning platform for HIV specialists and for physicians in primary care settings to gain valuable information about handling HIV comorbidities**. MyHIVclinic.org is a “virtual learning clinic,” with a steering committee of faculty and practicing clinicians from around the world. From cognitive impairment to thyroid disease, the website offers up to date guidelines and recommendations for clinicians providing care to a diverse population of PLWH.¹⁹

The Midwest AIDS Training and Education Center (MATEC) developed the **MATEC Clinician Scholars Program (CSP)**, which was designed to build HIV-care competency in minority or minority service practitioners (physicians, nurse practitioners, advanced practice nurses, physician assistants, registered nurses, oral health providers, and pharmacists) through a yearlong mentoring and training experience. The program develops practitioner skills around 11 core competencies and 33 learning objectives, with the goal that all program graduates leave able to provide intermediate level HIV care to patients. The scholar-learning framework includes 20 hours of HIV care training, 12 hours of clinical preceptorship care, and participation in evaluation activities. Program participants engage in distance learning and in-person trainings and receive support and guidance from CSP Mentors, who are experienced HIV clinicians over the course of the training. Because mentors and mentees work in locations close to one another, the MATEC allows for program participants to learn strategies and approaches to HIV care that are locally appropriate, allowing for the maximum benefit for the provider and the patients.¹⁶

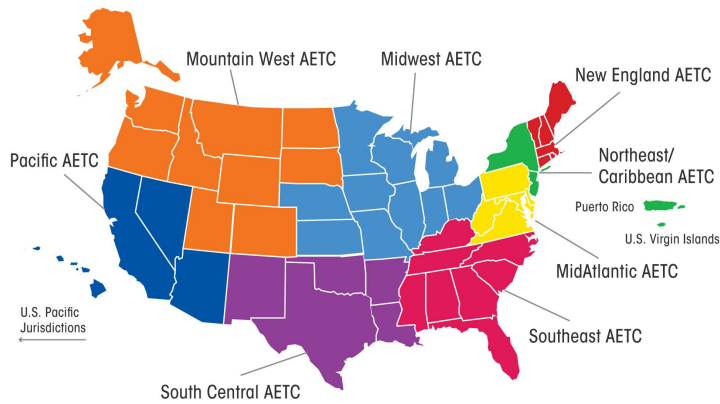
The University of California San Francisco implemented a collaborative mentoring project with the Gladstone Institute and the Center for AIDS Research (CFAR) for

mentor training. The **Mentoring the Mentors** program provides mid-career and senior investigators with mentoring tools and techniques to support early-stage investigators of diversity, with special attention to unconscious bias and micro-aggressions. The workshops, which are hosted in San Francisco, have been developed into curricula and best practices that can be implemented by other institutions. Analyses of these workshops showed statistically significant improvements in participant self-reports of all domains evaluated (maintaining effective communication, aligning expectations, assessing understanding, addressing diversity, fostering independence, and promoting professional development).^{14, 22} A similar curriculum, **Entering Mentoring**, is facilitated by the University of Wisconsin Madison over four 2-hour sessions.¹⁴ Another program, **Mentoring Programs to Diversify the Mental Health and Substance Abuse HIV/AIDS Research Workforce Through Innovative Educational Initiatives** has led to a large network of effective mentors.¹⁵

The Center for Teaching (CFT) at Peabody College at Vanderbilt University employs a number of programs to train teachers in best practice methods. For example, the Junior Teaching Fellows Program is a cohort model of eight junior faculty. Fellows discuss topics that are relevant (course design), have dinners with senior faculty to discuss teaching and build a community of practice, observe senior faculty teaching, and observe each other teaching. The program promotes thinking about pedagogical choices and provides a community building experience. Other programs include a graduate student training program (Certificate of College Teaching), informal themed discussion groups (Learning Communities), and individual consultations and observations by experienced staff (CFT Observations). Each of these programs could be adapted and implemented in the SE AETC to strengthen current training programs.²⁶

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Collaborating within the HIV Workforce

KEY POINTS

Introduction to Collaboration

In order to deliver high quality healthcare to PLWH, collaboration across medical and allied healthcare practitioners is essential.³ Aside from the provision of care within the clinical setting, professionals are needed outside of the clinic to provide social, financial, emotional, and logistical support for PLWH.

Many PLWH experience significant challenges aside from their HIV or AIDS diagnosis. Factors such as age, gender, race, income, education, mental health status, and health insurance can impact a person's ability to be retained in care. Some people experience challenges that are compounded by living in rural areas, where geographical access to care can serve as yet another barrier. Statistically, youth, minorities, and persons with low-literacy levels are most at risk for disengagement from HIV care. While these populations may experience disproportionately more issues with continued engagement in HIV care, it is critical that support outside of the clinical structure is available to help all PLWH access healthcare.¹

From the first contact with a healthcare provider at an HIV testing facility, the quality of the interaction between a newly diagnosed patient and providers is critical. A significant body of research demonstrates that patient dissatisfaction in the counseling, testing, and referral process can make follow up for treatment less likely. For example, patients who report lack of empathy from their diagnosing provider or who receive passive or inaccurate referrals often do not return to find the care they need.¹ Therefore, it is essential that standards be developed and followed so that newly diagnosed patients receive supportive counseling, testing, and referral experiences and are subsequently quickly engaged in clinical care with the support of a linkages to care (LTC) professional.⁴

Aside from initiation of care, retention in HIV, dental, mental health, and general healthcare is a challenge for PLWH, under-

High quality HIV care requires the collaboration of professionals from across many healthcare fields.

Strong connections between the workforce is critical to providing appropriate care.

Strategic steps to foster collaboration among the workforce include:

- addressing the varied needs of different populations of PLWH; and
- establishing respect, communication, and teamwork among the various service providers;

Recommendations include:

- train testing providers to deliver active referrals following an HIV diagnosis;
- establish protocols for linkage to care (LTC) for healthcare professionals along the continuum of care; and
- cultivate the leadership potential of PLWH who are well suited to serve as peer mentors for others within their community.

scoring how critical supportive allied health professionals are for the population.² From social workers to medical case managers, insurance benefit counselors to peer supporters, different approaches are required to meet the varied needs of PLWH. In order to make sure that patients do not fall through the cracks, collaboration and communication between different groups of providers is absolutely essential. Collaboration within the HIV workforce means different groups of providers learn from each other and work together to continually improve systems for referral and support for PLWH.¹

Strategies/Recommendations

Train testing providers in active rather than passive referrals after a positive HIV diagnosis. In an active referral process, providers contact LTC professionals (available 24/7 in many cases), schedule treatment appointments for patients, and in some cases accompany the patient to the appointment.¹

Train dedicated LTC professionals to provide client-centered case management to newly diagnosed patients. These professionals should serve as the single points of contact for patients, connecting with other providers as necessary. LTC professionals should be trained in motivational interviewing and be prepared to help patients navigate their initial diagnosis and the accompanying challenges of denial, stigma, and fear of losing familial support, among others.⁴

Prioritize recruiting LTC professionals that are culturally and linguistically concordant with the popula-

tions they serve. Establish protocol for transitioning clients from LTC professionals to long-term medical case managers who serve as the single person point of contact for patients after they complete their first care appointment.⁴

Prioritize collaboration for LTC programs between local public health departments, HIV testing and referral organizations, and medical care provider organizations.⁴

Prioritize interprofessional education programs (IPE) to encourage dialogue and learning among teams of physicians, social workers, nurses, mental health counselors, and other providers. The SE AETC currently has a strong IPE program operating in four project sites.⁹ The SE AETC should identify the most effective elements associated with IPE and seek to promote best practices and expand to new sites.

Train PLWH to be peer mentors and navigators so they can help others within their community find HIV education, counseling, testing and care.^{3,5}

Develop electronic medical record (EMR) or other tracking mechanisms that can be accessed in a privacy-sensitive way by a diverse care team, ensuring that patients are not lost to follow up.

Example Programs

STYLE (Strength through Livin' Empowered), funded by HRSA, is an evidence-based intervention to keep African American and Hispanic young men who have sex with men (YMSM) in care for HIV. The program is designed specifically for newly diagnosed patients or patients who are lost to care. The program includes three main strategies including a marketing campaign to promote testing, the integration of education and testing into youth congregation areas and a collaborative framework for providers working with newly diagnosed YMSM. Newly diagnosed or referred patients have appointments scheduled with a physician within 72 hours.

HIV-positive YMSM are simultaneously connected with support group meetings as well as substance abuse and mental health counseling. Medical case managers, who are available by phone and text, provide additional support.⁵

Care And Prevention in the United States (CAPUS) is an online web platform funded by HRSA, SAMHSA and the CDC. The goal of the website is to help HIV-positive people navigate care and get answers to their questions. With a section of the website focused on providers, and another including an updated resources directory for a variety of providers, this tool can help LTC and medical

case managers access the services they need as their clients' needs shift.⁶

Anti-Retroviral Treatment and Access to Services (ARTAS) is a training program for healthcare workers funded by the CDC. The goal is to prepare providers of various backgrounds to quickly link newly diagnosed PLWH to care. The training is specifically designed for LTC coordinators, medical case managers, and HIV testing counselors. The format of the training is mixed and includes modules to be completed online as well as modules presented in an in-person classroom setting. At the end of the training, participants are expected to have concrete tools to help newly diagnosed PLWH access care and be equipped to institute those practices in their employment environments so that a range of providers can work together to deliver supportive HIV care.⁷

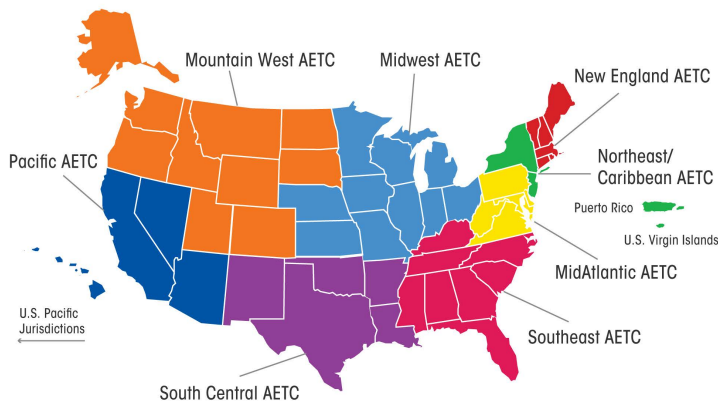
Programs for Positives (P4P) Peer Educator Certification Program began in 2015 with partial funding from the Georgia Department of Public Health. The goal of the program is to train PLWH to serve as peer educators in their communities. While completing continuing education credits (CEUs), PLWH are trained in the areas of leadership, health literacy, and facilitation. Upon completing the training, peer educators help members of their community learn about HIV, gain access to testing, and when applicable, connect with resources to receive care covered by their insurance or the payer of last

resort.⁸

Facilities funded by the WK Kellogg Foundation's Community Voices Initiative in Washington, Minnesota and New York co-locate medical, dental, behavioral and social care services in one facility (or within a mobile clinic) to help ensure continuity across different types of care. Research demonstrates that this model was successful at reaching PLWH who were from minority groups, were experiencing poverty, or were active drug users.²

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Introduction to Retention

Developing and maintaining a strong workforce requires careful attention to the factors that impact job satisfaction, such as career development, employee relationships with management, compensation and benefits, and work environment. Given the rapid shifts in HIV care, the providers, clinics, and allied health professionals who care for PLWH encounter unique workplace and professional challenges.⁶ Given that the satisfaction, morale, and stress-levels of healthcare providers have been shown to have an impact on patient reported quality of care, supporting job satisfaction is critical for both retention of the workforce as well as their provision of services.^{1-2, 17} Unfortunately, there is a dearth of HIV-focused research in the U.S. on this topic. However, strategies from across disciplines and industries can inform retention practices within the field. This section examines the key factors of retaining the HIV workforce.

Burnout in HIV

Burnout is broadly defined as psychological, emotional, and professional exhaustion from prolonged exposure to occupational stress, often resulting in depersonalization (feelings of callousness toward others and low sense of accomplishment).³ Providers who care for PLWH, both medical and allied health professionals, are more likely to experience burnout than other providers due to their unique experiences of social isolation, associative stigma, the nature of chronic illness work, feelings of helplessness/grief, attributions of blame toward the patient for their disease, and perceived threat of contagion.³⁻⁸ Issues of burnout and occupational health risks have also been noted among pathologists.⁹ Moderate to high rates of burnout have recently been found among HIV service providers in North Carolina; results also showed that length of time working in the field was associated with high rates of burnout.⁷

Broadly speaking, HIV-specific studies have shown that both individual factors (empathy, coping, communication style, stress,

Retaining the HIV Workforce

KEY POINTS

There is limited research on retention factors for the HIV workforce in the U.S.

Burnout is a key issue for retention, as are workplace factors, compensation, and career development.

Strategic steps to improving the workforce pipeline include:

- supporting workforce self care;
- investing in career development and professional networking;
- offering incentives and compensation to retain the workforce; and
- gathering employee feedback through ongoing and regular institutional surveys.

Recommendations include:

- create opportunities for career development, professional networking, and mentorship;
- foster a workplace culture of self-care to interrupt burnout; and
- develop mechanisms for employee feedback and prioritize quality improvement mechanisms to address feedback.

satisfaction, job involvement, role, and attitude) and organizational-level factors (teamwork, involvement in organizational decision-making, and social undermining) are correlated with burnout.³ The widespread experiences of burnout within HIV care have been well-documented and indicate the need for changes at the policy level (i.e., greater provision of funding and services) and at the organizational level (i.e., fostering a culture of self-care).

Job Satisfaction Factors

A number of studies have shown that environmental workplace factors impact job satisfaction. International studies of nurses have shown that workload, social capital (accessible and beneficial social resources, such as trust or reciprocity), and decision latitude (clinical autonomy) are significant predictors of job satisfaction.¹⁰ Similar results have been found regarding the job satisfaction of allied health providers, who included supervision, competency, recognition, advancement, autonomy, sense of accomplishment, and supervisor support as primary factors for satisfaction.¹¹ Perceived colleague stress and ability to separate personal and professional spheres of life have been shown as significant factors for attrition of human service providers.⁵ Mentoring has also been shown to increase job satisfaction, productivity, and quality of life.^{22, 23}

Studies outside of the healthcare industry confirm that these factors are part of job satisfaction; the Society for Human Resource Management's national survey found the top five "very important" factors of job satisfaction from 2002-2012 included: (1) compensation/pay, (2) job security and opportunities to use skills/abilities (tied in second), (3) relationships with immediate supervisor, (4) benefits and organizations financial stability (tied in fourth), and (5) the work itself.¹²

HIV-Specific Job Satisfaction Factors

Research on employee satisfaction in the HIV field, while limited, has shown important findings for both retention and attrition. Issues of salary/reimbursement are increasingly cited as sources of dissatisfaction. For example, the 2009 HIV Medicine Association report found that medical residents avoid ID fields because of low salary.²⁸ More recently, a 2016 study found that physicians, physician assistants, and nurse practitioners in HIV care were generally dissatisfied with their salaries/reimbursement.²⁹ Factors found to positively influence job satisfaction among nurses in HIV care included in-

terdisciplinary teamwork, developing relationships, proximity to material and human resources, chances for knowledge and skill development, sense of accomplishment, and participating in capacity-building of HIV nurses.¹³ International studies have shown similar results. An Australian study found that themes associated with retention included interest and inspiration, community calling, right place and right time, challenge and change, making a difference, and enhanced professional identity.¹⁴ Factors for Vietnamese HIV service providers included training opportunities, intrinsic motivation, meaningful tasks, and social recognition.¹⁵ Finally, international studies of health workers in HIV care also have shown a correlation between stigma and job satisfaction, suggesting that providers in contexts of high HIV stigma may experience less job satisfaction.¹⁶

Strategies/Recommendations

Further investigation of the institutional factors that impact retention should be a top priority. These studies should include evaluation of programs and interventions designed to improve job satisfaction and organizational culture. Studies should also consider burnout rates of providers in the U.S.

Provide the HIV workforce with access and opportunity for training and continuing education. These opportunities should emphasize professional collaborations and foster teamwork.

Connect novice employees with experts in their field for mentoring. As stated in previous sections, a mentorship structure that includes mentor training for cultural competency is critical to supporting the HIV workforce. Equally important is assessing the mentoring program for success.²¹ Building mechanisms for feedback and improvement are significant components of retaining providers. See the Example Programs for a possible measurement tool.²¹

Articulate explicitly the rewards of HIV work. Benefits of the work are wide-ranging and include intellectual (engaging the intellectual challenge of a rapidly-changing field), social (contributing to a social justice agenda to care for often marginalized people), and professional (networking relationships and collaboration) rewards.¹⁴

Implement workplace structures to foster self care and address mental health issues, including the develop-

ment of individual coping strategies. These structures should include workplace training to recognize and intervene with burnout, as well as a culture of praising employees for self care habits.¹⁷

Provide opportunities for regular supervision and workplace trainings to openly discuss attribution blaming by providers, the impact of world views on quality of care, and stigma-reduction interventions. These trainings and discussions can help alleviate tension and burnout in the workplace.⁶ Additionally, rapport between employees and managers is a top factor for job satisfaction; opportunities for supervision foster these relationships.

Finally, times of supervision and training should include mechanisms to gather employee feedback, such as regular supervision and anonymous surveys. Take concerns

seriously, develop strategies to address workplace issues, and communicate the plan to the workplace.¹⁸

Example Programs

Several groups, including the Minnesota Hospital Association and the American Hospital Association have published guides for fostering career growth, positive workplace culture and strong employee retention.^{19,18} Topics included in the resources are wide-ranging and include Human Resources, training, and workplace design. The report includes local examples for each component.¹⁹

The nursing program at Florida Atlantic University prioritizes student emotional health by offering a course designed to build self-care skills. The course trains students in self-care activities such as yoga, music therapy, and mindfulness. Based on Adult Learning Theory, this course could be adapted to workplaces to support the holistic health of employees.²⁴

The “Mentorship in Clinical Training Scale” was developed in 2016 to measure satisfaction of mentorship in four domains: clinical skills training, research skills development, professional socialization and networking, and psychosocial support. This scale, while designed for family therapists, may be a useful tool for a variety of institutions seeking to assess and strengthen their mentorship program. Initial tests of the scale suggested that the amount of time spent being mentored, a mentorship-friendly culture, and having access to mentors

outside of the program are predictors of mentorship satisfaction.²¹

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The HIV Workforce in the Southeast

Synthesis of Key Issues

The Southeast region of the U.S. has some of the most significant health challenges in the nation. Rates of HIV infection are of epidemic proportions,⁸ and the region has the highest rates of new HIV diagnoses as well as the highest rates of HIV fatalities.⁵ A competent, diverse, and strategically located workforce is critical to address the needs of the more than 228,000 PLWH in the region.¹ Attracting, hiring, training, and retaining this workforce requires careful attention to the context of the workforce and the challenges they face. This report has outlined the major themes impacting the HIV workforce. This section applies these trends to the Southeast by describing the unique characteristics of the Southeast, offering targeted recommendations based on this context, and outlining a strategic plan for next steps.

Context of the Southeast

Intersecting Inequalities

As mentioned throughout this report, the Southeast is marked by complex and intersecting issues of health disparities, poverty, and racial inequality. These issues compound to create difficult contexts for both patients and workforce. The region has the highest rates of HIV in the nation, as well as disproportionately high rates of other health needs, including sexually transmitted diseases, kidney and heart disease, and diabetes.^{2,5} The burden of the HIV epidemic is concentrated amongst minorities. In Alabama, Louisiana, Georgia, and Mississippi, for instance, African Americans make up 30% of the population but account for 65-75% of the cases of HIV.² African Americans in the South are twice as likely as whites to experience poverty, more likely to experience unstable housing, and are more frequently incarcerated, all of which create additional health vulnerability.² Additionally, the states where new cases of HIV

among Latinos are most concentrated are in the South; Latinos make up 17% of the U.S. population, but 21% of the PLWH.² Furthermore, the Southeast has high rates of poverty, impacting both the services that can be offered at local clinics and the ability of patients to access services.² The health infrastructure in the region is less developed than other regions and geographically dispersed, further limiting accessibility for patients and opportunities for the workforce.⁶

Comorbidities

In the region where many health indicators are the worst in the nation, it is imperative that the HIV workforce be prepared to handle the comorbidities of their patients.⁹ As PLWH live longer lives, it is essential that the healthcare workforce be equipped to support them through a range of challenges that may arise over their lifespans. In the Southeast, where minorities experience health challenges greater than nonminority groups, the workforce must develop the capacity to support those groups.³ The physical, mental, and emotional health needs in the region require a workforce that is trained to manage a variety of diagnoses, prepared to link patients to other providers, and able to ensure their patients have access to other service sites. These demands on the workforce, heightened in an area with limited health infrastructure and high poverty rates, are substantial.

Stigma

In addition to sharing high rates of poverty, health, and racial inequality, the states in the Southeast also experience elevated rates of stigma around HIV. Stigma is a pervasive challenge in the control of the HIV epidemic in the Southeast. From education to testing to care, stig-

ma negatively impacts patients and providers across the care continuum. Research demonstrates that stigma around HIV is most pervasive in rural areas, and the South has the highest number of people living with HIV in rural areas, making the issue a significant challenge for care.³ The HIV workforce in the region is burdened with combatting stigma, supporting their patients, and managing their own experiences of associative stigma.

Geographic Isolation

All of these factors lead to significant challenges in both recruiting and retaining providers in the Southeast. Factors associated with job satisfaction, such as compensation and career development, may be less accessible in the Southeast. Studies show that providers are less likely to relocate to areas with low numbers of service providers, whether rural or non-rural.⁴ Lack of health infrastructure may provide less opportunity for promotion and increase care burden on providers, as well as create more difficult working conditions. These settings

may also require professionals to be on-call more often and/or provide lower compensation. Rural areas may provide less opportunity for spousal and family members, which have been shown to be an increasing consideration for younger providers.⁷

Summary

These issues lead to a context of extremely high need, both in terms of number of patients and severity of diagnosis, as well as an infrastructure ill-prepared to provide the care and support the workforce. The impact of burnout in this context, where large-scale social issues limit patient access to care, is likely to be even more heightened. The communal and cultural issues outside of the care infrastructure-- such as geography and stigma-- further impact the ability and desire of providers to choose the Southeast as a working location. The resultant shortage in the HIV workforce is seen today, and predicted to only increase.

Strategies/Recommendations: A Summary

The intersecting and multi-level components of the HIV workforce shortage require that the SE AETC simultaneously address three separate, but connected, components: (1) recruiting more people into the workforce, immediately; (2) capacitating current professionals in the workforce to adequately care for the needs of PLWH; and (3) investing in long-term recruitment, training, and retention of professionals who are both URM and local to the region. The following recommendations, mentioned throughout this report, are summarized below.

Building the Pipeline

Develop a dedicated position for recruitment. This strategy should focus on increasing awareness about the high need in the Southeast, as well as actively recruiting URM professionals. Additionally, marketing and recruitment strategies should articulate the rewards of working in HIV care, especially the value of meaningful and altruistic work. This position could utilize programs mentioned in Section 1: Recruitment, such as the Teach for America model, to focus on getting professionals to the Southeast.

Focus on investing in local talent from the Southeast region. Given that the geographical isolation of the Southeast is a primary recruitment factor for many new professionals, we suggest that the SE AETC invest in recruiting, supporting, and training residents already in the region. While investing in local residents is a long term strategy, it may have a significant impact in the provision of service, influencing stigma, and generating new solutions. Investing in educational collaborations within the region may be a useful method, and many models already exist, such as those listed on page eight.

Continue to coordinate with federal funders and macro-level policy-makers to ensure that the HIV workforce is adequately compensated for their work. This includes advocating for issues of reimbursement to providers and loan repayment for recent graduates. These components of recruitment are critical to strengthening the workforce pipeline.

Capacitation

The literature overwhelmingly suggests that cultural competency and comorbidity training are vital needs

among the current HIV workforce. This is even more pertinent for providers in the Southeast, whose patients are disproportionately people of color and face significantly more health needs than other regions in the U.S. Therefore, we suggest that the SE AETC focus on strengthening the Minority AIDS initiative, and broadly focus on comorbidity workshops. Other regional workshops and trainings should include cultural competency training, as well-structured opportunities for mentoring.

Develop a multi-tiered model to strengthen the training services of the SE AETC, based on best practices from the Vanderbilt University Center for Teaching. These tiers should include the following: (1) large-scale methods to reach across the regions, such as virtual training opportunities; (2) medium-scale trainings and workshops for practitioners and program coordinators, such as summer institutes, fellows programs, or learning communities; and (3) small-scale opportunities for observation and consultation with key professionals in the region, such as individuals consultations, observation, and video assessments. The purpose of this model is to ensure that trainers and facilitators are effectively using best practices of teaching to ensure that the workforce is fully equipped to care for PLWH.

Collaboration

Focus on strengthening wrap-around services for patients, to mitigate the impact of losing a staff person. Wrap-around services should focus on ensuring that more than one professional is connected to each patient, utilize active referrals to link patients to services, and carefully document for sustainability. These strategies will ensure that new providers can pick up where others left off.

Expand the IPE program, which provides unique opportunities for professionals from diverse fields to collaborate together. These collaborations create avenues for future teamwork, build professional connections and respect across disciplines, and may lead to generative problem solving among the care team, such as ideas for transportation needs of patients and combatting stigma. The SE AETC model has the potential to become a model disseminated nationally.

Retention

Invest in new research on job satisfaction in the HIV workforce. These studies should examine the top factors

of retention and attrition and how these vary across different fields. This research should also examine the primary factors that impact where professionals choose to locate, in order to develop targeted recruitment for the region. Regular measurement of organizational climate, discussed earlier in this report, sets the stage for this research.

Secondly, we suggest that the SE AETC develop a formal mentoring structure. This structure should include training for mentors, mechanisms for mentee/mentor feedback of the program, and regular mechanisms for evaluation. Particularly as HIV care continues to shift to a primary care context, connections between novice and expert professionals is critically important. Additionally, a structured mentoring program may provide important support to the rural workforce and help recruit more professionals to the region.

Finally, we suggest that the SE AETC continue to invest in training practitioners throughout the region and focus on reaching isolated providers. Opportunities for career development and professional networking are important factors of job satisfaction. In light of the geographic isolation of the Southeast, access to training opportunities may be important ways to connect providers with a professional support group, encourage their practice, and discuss ways to improve their skills. The SE AETC has noted that some regional areas with the highest rates of HIV have less than 20 providers who have received training.

Strategic Next Steps

The Southeast is a large, diverse region, and while there are common trends throughout the area, each city, state, and county are unique. As a first step in developing a plan for moving research into practice, it is recommended that these important contextual factors be identified and developed as a companion document

We suggest that a series of focus groups and key informant interviews be undertaken to gather pertinent follow-up data to this report. In order to gain a holistic view of the region, we suggest using a maximum variation purposive sampling – that is, choosing participants that represent a variety of different states, clinical settings (academic/community), geographic locations (urban/rural), patient populations (MSM, minority, women, youth), and occupations (MD, nurse, dentist, pharmacist, case managers). Given the scope and timeframe of the project, the goal would be to have 2-3 focus groups of 6-8 participants. We anticipate these focus groups would be conducted in locations convenient to the participants and last for about two hours each. To include participants who may not be able to attend the focus group, such as those in extremely remote areas, we suggest that phone interviews with a sample of key informants be conducted. Once the focus groups and interview data are collected, the data will be analyzed in relation to this report's final recommendations. However, the data may also be useful for future needs assessments or SE AETC reports and can serve dual purposes. Below are possible questions for the focus groups or key informant interviews.

Building the Pipeline

1. What strategies currently exist to recruit professionals from among local community residents?
2. What barriers exist for recruiting professionals from among local community talent?
3. What two steps do you feel could be taken to increase the diversity of those coming into the HIV care workforce in your local area?
4. What community resources/organizations could you partner with to build capacity for recruiting individuals to various professional positions?
5. Are there post secondary institutions in your area that you could partner with to create a "pipeline" approach to recruiting talent into the workforce?

6. How could current professionals create a plan for mentoring new professionals into the workforce? What are some ideas that might work in your location?

Capacitation

1. As you think about your own professional development, what 2-3 new training programs would you like to see offered that would enhance your continuing education in the field?
2. What areas of professional development need to be addressed to increase your abilities to understand and meet the needs of your clients (culturally, socially, economically, etc.)?
3. What type of ongoing training and educational follow-up support would be of value to you in your everyday working experience?
4. What do you see as benefits and barriers to a professional mentoring program where more experienced professionals in the workplace mentor new/novice employees?
5. What do you perceive as training needs for others where you work?

Collaboration

1. Do you believe that there is an effective collaboration among your local providers that makes referrals to services after HIV diagnosis efficient and beneficial to your clients? Why or why not?
2. Describe protocols that are in place for linkage to care (LTC) for healthcare professionals along the continuum of care for clients in your community.
3. What strategies would you recommend to establish/improve upon the referral services in your area?

Retention

1. In what ways have you been able to engage in career development activities in your workplace?
2. Do you find networking with other professionals to be beneficial to your overall passion and commitment to this field? What types of opportunities would you like to see made available to engage you in more networking experiences?
3. What strategies do you currently engage in to ensure your own self-care? How could the work environment be improved to avoid burnout?

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