REVIEW AND COMPARISON ACROSS TRAINING PERIODS OF THE ACTIVITIES OF THE PENNSYLVANIA/MIDATLANTIC AIDS EDUCATION AND TRAINING CENTER (2002-2004)

by

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Darya Leyzarovich, M.S.

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The Pennsylvania/MidAtlantic AIDS Education and Training Center (PA/MA AETC) is among the largest professional training providers for HIV treatment education in the world. The program seeks to improve HIV-related and primary care for underserved populations by strengthening the capacity of clinician and other providers to understand and treat these populations. Training is organized into three basic levels: didactic(Level I), skills building(Level II), clinical hands on training(Level III), a recipient-driven clinical consultation (Level IV) and technical assistance (Level V).

During the 2002-2003 grant cycle(study year 1), the AETC provided a total of 847 structured training events (Levels I through III), as well as 429 clinical consultations and 628 responses to requests for technical assistance. For the grant cycle 2003-2004(study year 2), the AETC provided a total of 877 structured training events (Levels I through III), as well as 912 clinical consultations and 842 responses to requests for technical assistance. Data collected by the PA/MA AETC was obtained separately for each year and data analysis was performed using Minitab and Access. Pie and vertical bar charts were created in SigmaPlot to summarize activities over the two years. The evaluation demonstrates the nature and extent of AETC training and the ways it may contribute to enhancing the knowledge and skills of the participants. The two core evaluation questions for 2002-2004 are the following 1) do the programs reach the primary care provider audiences with a focus on Ryan White, community/migrant health centers

(CMHCs), minority providers, and those serving medically-underserved and the poor and 2) do the regional programs address key content areas that address Ryan White CARE Act (the largest source of federal funding for people living with HIV/AIDS in the United States) requirements.

A review of the data shows that a large percentage of AETC training participants are minorities or treat minorities and are serving a heavy minority client/patient caseload. More than half of the participants are physicians and nurses. Employees of CARE Act-funded agencies form a large proportion of the total trainees enabling them to acquire the latest HIV treatment knowledge and skills. The AETC strengthens their HIV knowledge and skills by providing training in advanced clinical management topics as well as topics relevant to understanding and working with the special populations served by many of the trainees.

Collectively, these training activities contribute to enhancing both the quality and the continuity of HIV-related care provided to underserved and vulnerable populations across the Pennsylvania/MidAtlantic region by clinicians and other health care providers.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Introduction

The AIDS Educational and Training Centers (AETCs) Program is the professional training arm of the Ryan White Comprehensive AIDS Resource Emergency (CARE) Act. It is perhaps the largest professional education program devoted to HIV/AIDS and is carried out through 11 regionally-based AETCs and four national centers (National HIV/AIDS Clinicians' Consultation Center, National Minority AETC, National Evaluation AETC, AETC National Resource Center) (1).

The Ryan White Comprehensive AIDS Relief Emergency Act (the CARE Act) is the largest source of federal funding for people living with HIV/AIDS in the Unites States. The U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA) administer these funds. The funds reach people living with HIV/AIDS through various funding streams: city and state grants; direct grants to health care providers; and grants specifically allocated for HIV medications, dental care, provider training and education, and special programs (2).

The CARE Act consists of five components or Titles. While each Title is directed towards a different aspect of the HIV/AIDS care system, all of the Titles complement each other in order to provide comprehensive services for people living with HIV/AIDS. Title I of the CARE Act provides grants to 51 Eligible Metropolitan Areas. To qualify for Title I funds, jurisdictions must have a population of at least 500,000 people with at least 2,000 cumulative AIDS cases reported during the last five years. Title II provides grants to states and U.S. territories through state health departments. These funds are distributed based on a formula that estimates the number of people with AIDS in each state. Title III supports primary health care for people living with HIV/AIDS. Funding can be used for the following services: HIV testing; early intervention and outreach; risk reduction counseling; case management; oral health; nutrition; and mental health services. Title IV funds services for children, youth, women living with HIV and their families. Grants are provided to public and nonprofit organizations. The last component of CARE Act is Part F. Within Part F, there are three distinct programs: the HIV/AIDS Dental Reimbursement Program, Special Projects of National Significance, and the AIDS Education and Training Centers. The Dental Reimbursement Program provides funds for oral health care services for people living with HIV/AIDS. The Special Projects of National

Significance fund HIV service delivery models to provide health and social services to underserved populations. (2).

The major goals and objectives of the project are to support existing skills and the acquisition of new skills and knowledge of health providers. The education and training activities of the PA/MA AETC have a direct impact on the HIV service delivery system in the region by increasing access to comprehensive state-of-the-art HIV clinical management. The aim of the AETC Program is to reach out to professionals who have direct patient care responsibilities for HIV-infected people. Training is targeted especially at providers who serve underserved populations and at CARE Act-funded facilities, emphasizing training on the current clinical management of HIV, and developing and adopting innovative training methods toward these goals. The AETC custom designs programs, taking into account the providers' rural settings, experience and volume of HIV patients (1).

The AIDS epidemic in the U.S. changed with the introduction of highly effective antiretrovirals in 1996. Advances in medical treatment have allowed people diagnosed with HIV/AIDS to live healthier, longer lives, and as a result, more people are living longer with HIV before they progress to an AIDS diagnosis. To address this shift in the epidemic, the reauthorization of the CARE Act in 2001 required that funding for Titles I and II be expanded to reflect the incidence of HIV in addition to AIDS (2).

The Pennsylvania/MidAtlantic AIDS Education and Training Center (PA/MA AETC) provides education and training on HIV disease to primary health care professionals in Region III of the US Public Health Service. The University of Pittsburgh Graduate School of Public Health Department of Infectious Diseases leads the region's consortium and serves as center headquarters, providing evaluation, programmatic and fiscal direction, planning, monitoring, and oversight of the project. The PA/MA AETC is comprised of a partnership between the University of Pittsburgh Graduate School of Public Health, Johns Hopkins Commonwealth University, West Virginia University, Inova Healthcare (Virginia), Christiana HealthCare, Wilmington Hospital (Delaware), and the Health Federation of Philadelphia/MCP/Hahnemann University, University of MD at Baltimore, Ohio State University and Howard University (3).

The PA/MA AETC recognizes the complicated issues of providing quality care and focuses on the entire health care team including health professionals, emphasizing physicians, dentists, nurses, nurse practitioners, physician assistants, pharmacists, and other members of the

HIV treatment team. There is an emphasis on training minority providers and providers who serve minority populations, within this population. Targeted audiences of training, consultation, technical assistance include providers from all Ryan White programs, community/migrant health centers (CMHCs), jails and prisons within the adult correctional system, juvenile detention centers, managed care organizations, state agencies, maternal child health providers, family planning facilities, STD clinics and other programs serving the poor, disenfranchised, and medically underserved in both urban and rural areas (3).

The present document is part of the evaluation and continuous quality improvement program at PA/MA AETC. It describes training events that were conducted by PA/MA AETC during the grant cycles 2002-2003 and 2003-2004 years. A set of program priorities guide the professional training activities such as: 1) concentrating on reaching out to professionals who have direct patient care responsibilities for HIV-infected individuals; 2) targeting providers caring for vulnerable populations and those working at Ryan White CARE Act-supported facilities; and, 3) focusing the training content on the clinical management of HIV disease. These training priorities are intended to support the objectives of the Ryan White CARE Act. In particular, training activities may contribute to achieving one or more of the following HIV/AIDS bureau objectives: 1) ensuring equal access for underserved populations; 2) providing CARE Act clients with care of the same quality received by other people living with HIV; and, 3) providing programs that reduce HIV related morbidity and mortality. To achieve these objectives, the PA/MA AETC program distinguishes five overlapping levels of professional training (1).

Level I programs are didactic presentations such as a lecture with the training objective of changing knowledge and attitudes. Level II is a skills building, clinically-based workshops designed to change attitudes and skills through a more intensive and participatory activities such as small group interactive sessions, workshops, role-play and case discussion. Level III is a clinically-based hands on training where the objective is to change knowledge, attitudes, and clinical skills, as well as to increase the comfort and confidence of the trainee to make appropriate clinical decisions (1).

Clinical consultation services and technical assistance complete the major activities. Level IV is the clinical consultation service that has three intended results: 1) to improve clinical problem solving; 2) to change provider practices of the consultee to make better or more

appropriate clinical care treatment decisions; and 3) to provide on the spot current HIV treatment recommendations regarding specific HIV patient care issues (1).

Level V is the technical assistance and provides resources and guidance to improve HIV service delivery and performance at the organizational and individual provider levels. The focus is on organizational or programmatic issues about HIV service delivery (1).

PA/MA AETC collects data by administering a series of standardized data collection forms that document these five levels of professional training activities. Information is gathered both about the participants, and about each training event as a whole. The information in four PA/MA AETC forms were used for this analysis. Participants are asked to complete a one-page Participant Information Form (PIF) (Appendix A), which includes an expanded list of patient populations, documenting the extent to which training programs are serving minorities and other vulnerable populations. Information documenting the extent of training for hard-to-reach providers and CARE Act-funded agency providers is also collected. Another item documents trainees' involvement in the clinical management of HIV-infected patients on antiretroviral therapies. Each training event, regardless of the number of participants is described by a Program Record Form (PR) (Appendix B). This form has training topics and an expanded list of training modalities to capture the use of innovative and emerging training technologies. The third form is a Clinical Consultation Form (CC) (Appendix C) which describes (Level IV) clinical consultation events or session. The fourth form is a Technical Assistance Form (TA) (Appendix D) which describes (Level V) technical assistance requests (1).

Table 1 Data Sources (A single check mark signifies data source. A double check mark

	Participant Information Form(PIF)	Program Record (PR)	Clinical Consultation (CC)	Technical Assistance (TA)
Training Hours		✓	✓	✓
Type of Training Event		✓ ✓		
Content and Topics of Training Events		✓	✓	✓
Training Modality and Methods		✓	✓	✓
Number of Participants	✓	✓	✓	
Participant's Employment Setting	✓		✓	✓
Geographic location (Urban, Rural, Suburban)	✓		✓	✓
Linkages to RWCA-Funded Agencies	✓	✓	✓	✓
Participant's Profession	✓ ✓		✓	
Participant's Race and Ethnicity	✓			
Participant's HIV Clinical Management Experience	✓			
Client/Patient Populations of Participants	✓ ✓		✓	

All forms from all the PA/MA AETC local performance sites are sent to the Data Center, which is located in the University of Pittsburgh, Graduate School of Public Health. The forms are scanned, verified in Telefom, and then exported into an Access Database, where all the handwritten participant comments are entered. All other fields are scanned into the database. The applications have precoded questions. The data were collected and analyzed separately for each year. Data were analyzed using Minitab (10). Data were edited and reviewed for standardization. Minitab was also used to carry out statistical tests. Chi-squares were used for statistical analysis of proportions, p-values less than .05 were considered statistically significant. Pie charts and vertical bar charts were created in SigmaPlot (11) to summarize activities over the two years, compare differences and similarities over time and to address research questions through this evaluation. The following are the core evaluation questions for 2002-2004:

1) Do the programs reach the primary care provider audiences with a focus on Ryan White, CMHCs, minority providers, and those serving medically-underserved and the poor?
2) Do regional programs address key content areas that address CARE Act requirements? (3).

1. Section One: Overview of Training Events

1.1. Number of events and participants by training levels

During the 2002-2003 grant cycle, PA/MA AETC conducted 847 different programs in Levels I, II, and III and 877 programs in the 2003-2004 grant cycle. The programs in 2002-2003 grant cycle included 5,700 hours of training and were attended by 16,710 participants (refer to Table 2.1) and 4,802 hours and 16,028 participants in 2003-2004 grant cycle. Figures 1.1aI and 1.1aII show that a large proportion of training is devoted to working with a relatively small number of participants in the more time-intensive, clinically based training programs of Level III. 23% of the programs are Level III for the grant cycle 2002-2003 and 21% for 2003-2004 grant cycle (4-6). The distribution of the percentage of training events by training level is similar across two years.

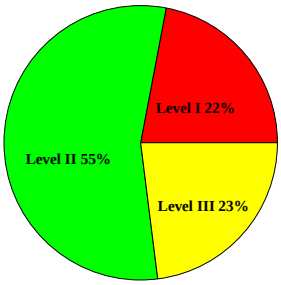

Figure 1 Training Events N=847 Total Programs(2002-2003)

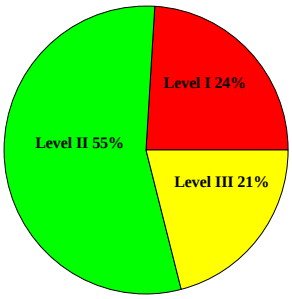

Figure 2 Training Events N=877 Total Programs(2003-2004)

The contribution of Level III, training to improving participants' skills is more obvious in Figures 1.1bI and 1.1bII, when we observe that 54% of the training hours are devoted to Level III for grant cycle 2002-2003 and 47% in the 2003-2004 grant cycle. This directly addresses the priority of reaching out to professionals with direct-care responsibilities, who are most likely to request and enroll in the higher levels of training. The training sessions contribute both to reducing the level of HIV-related morbidity and mortality and enhancing the level of care provided to patients (4-6). The percentage of total training hours by training level is similar across two years.

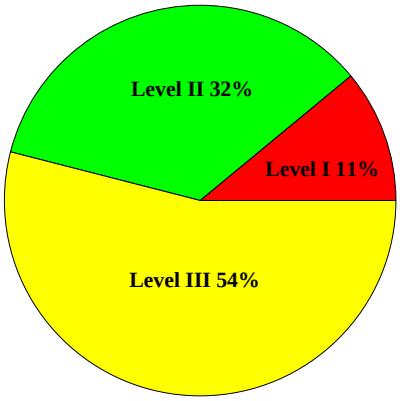

Figure 3 Total Training Hours N=5,664 Training Hours for 847 Programs(2002-2003)

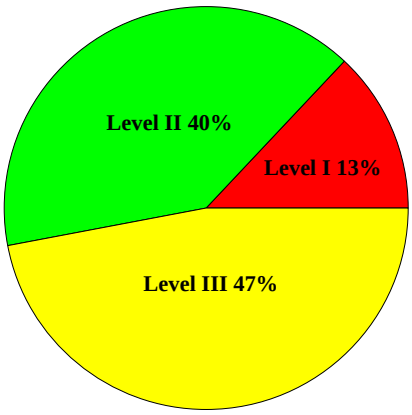

Figure 4 Total Training Hours N=4,802 Training Hours for 877 Programs(2003-2004)

The numbers of participants attending events at each training level are shown in Figures 1.1c1 and 1.1c2. The overwhelming majority (96%) attended Level I and II programs which provide classroom-based training in the grant cycle 2002-2003 and 99% in the 2003-2004 grant cycle. The count of participants per training level (Figures 1.1cI and 1.1cII) overstates the actual number of different individuals participating in training, as it counts the number of participants who participated in a specific level of training more than once. The number of repeaters is an indicator of the success of the AETCs' training, as participants decide to return for further training (4-6). The distribution of total number of participants by training level is similar across two years.

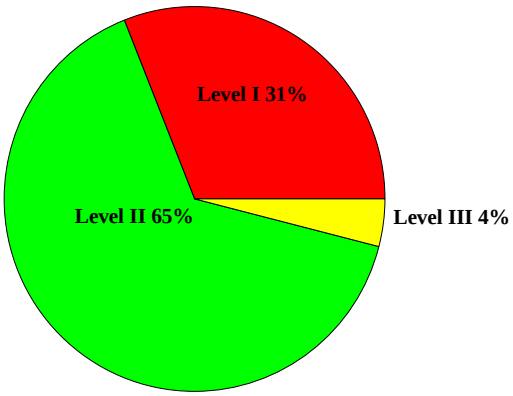

Figure 5 Total Number of Participants N=16,710 Participants(2002-2003)

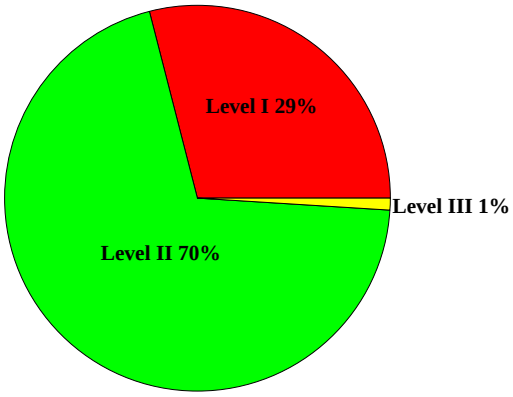

Figure 6 Total Number of Participants N=16,028 Participants(2003-2004)

A better assessment of the relative contact between AETC and participants across training levels is the participant-contact hours, which are calculated by multiplying the number of participants in a training program by the duration (in hours) of the program. While a larger number of participants attend Level I and Level II programs, the intensity and hours of contact are far higher in Level III events. This difference is reflected in Figures 1.1dI and 1.1dII, illustrating the number of hours of training offered at each level. While Level III accounts for only 4% of individual attendees, it accounts for 9% of the training contact hours received by AETC attendees in grant cycle 2002-2003 and for grant cycle 2003-2004 Level III accounts for only 1% of individual attendees, it accounts for 5% of the training contact hours (4-6). The distribution between the two years for the total participant contact hours by training level is similar for the two years for Levels I and II, for Level III the percentage went down from 9% to 5%.

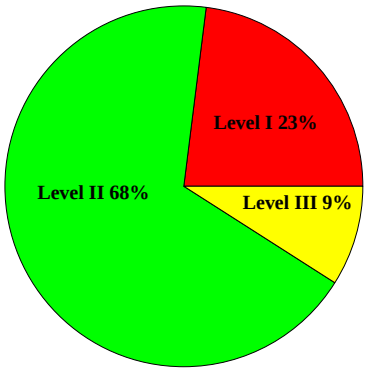

Figure 7 Total Participant Contact Hours Total Participant Contact Hours=74,664(2002-2003)

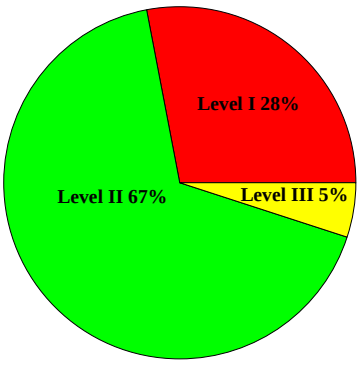

Figure 8 total Participant Contact Hours Total Participant Contact Hours=62,521(2003-2004)

An individual might participate in more than one training event. This contributes to the development of the multiple types of knowledge and skills necessary to effectively treat a complex condition such as HIV disease. It also demonstrates that participants value the training provided by the PA/MA AETC enough to return. Figures 1.1eI and 1.1eII better approximate the actual number of distinct individuals trained. It displays the estimated number of different individuals attending different levels of training programs. The method that was used to compute unduplicated counts of individuals trained can be found in Appendix E for 2002-2003 grant cycle and in Appendix F for the 2003-2004 grant cycle. Applying this method, we estimate that approximately 11,029 different individuals attended Levels I, II and III for the grant cycle 2002-2003 and 10,584 different individuals in the grant cycle 2003-2004 (5-7). The distribution of the number of individuals trained in Levels I and II is similar across two years, however for Level 3 it went down from 613 individuals in the first study year to 248 individuals in the second study year.

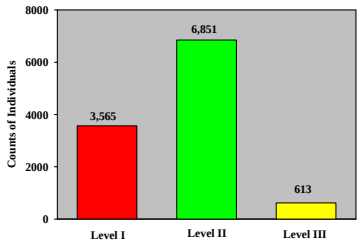

Figure 9 Unduplicated Counts of Individuals Trained N=11,029 unduplicated participants(2002-2003)

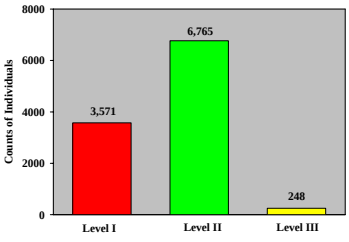

Figure 10 Unduplicated Counts of Individuals Trained N=10,584 unduplicated participants(2003-2004)

Figures 1.1fI and 1.1fII show that approximately 13% of participants have previously taken an AETC training and hence chosen to return for another in 2002-2003 grant cycle and in the second study year it increased to 19%. This speaks to the value placed on AETC training by participants (4-6).

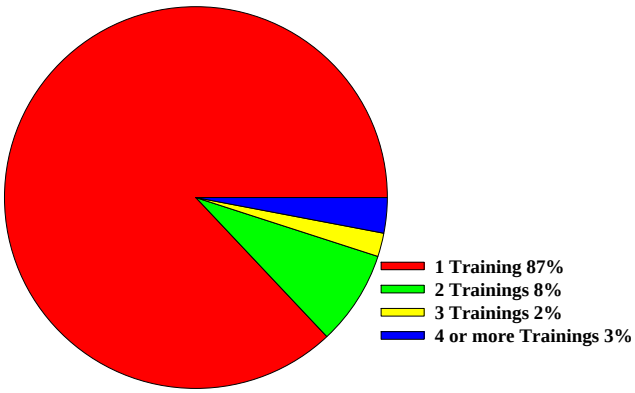

Figure 11 Number of participants by number of trainings attended(2002-2003)

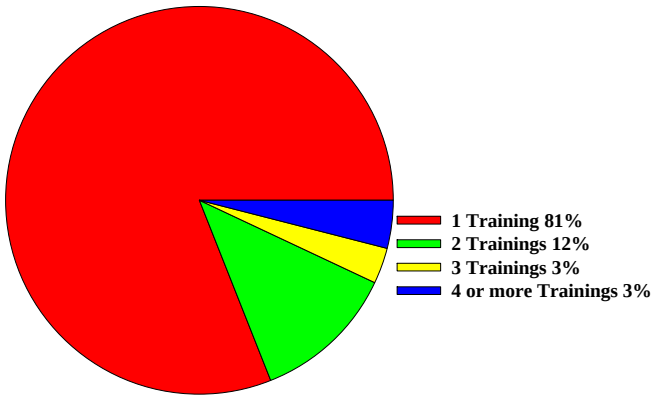

Figure 12 Number of participants by number of trainings attended(2003-2004)

1.2. Training methods and materials

Almost all of the AETCs' Level I through III training events involve in-person presentations through lecture. Distance learning methods are primarily used to supplement face-to-face training. Figures 1.2I and 1.2II illustrate the distribution of modality utilization for all training events (4-6). The percentage of CD Rom/DVD/Video modality method increased from 13% to 27%, while the percentage of conference modality method decreased from 13% to 5%.

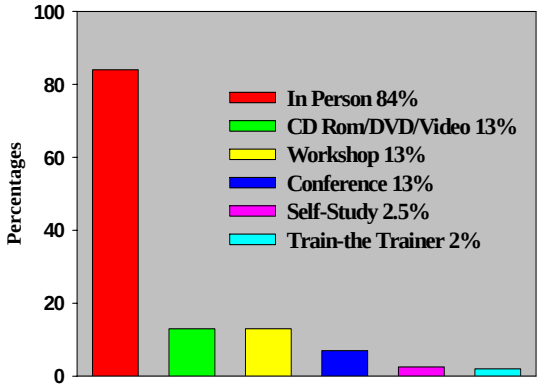

Figure 13 Percentage of Training Events Using Each Modality (may include more than one modality)(2002-2003)

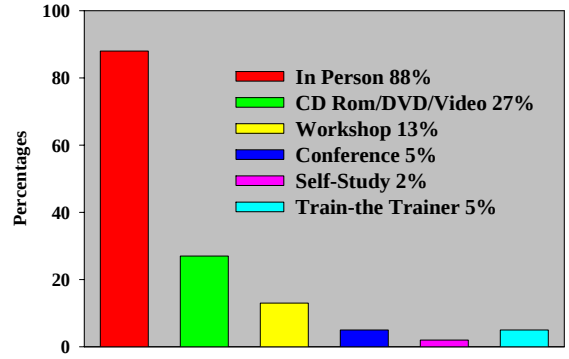

Figure 14 Percentage of Training Events Using Each Modality (may include more than one modality)(2003-2004)

1.3. Training Ryan White CARE Act Providers

As the professional training arm of the CARE Act, an important priority of the AETCs' program is facilitating training activities for agencies and providers who receive CARE Act funding.

Figures 1.3I and 1.3II show the percentage of participants who work for CARE Act-funded agencies by level (4-7). The distribution of the percentages of participants working in CARE Act Agencies in Collaboration Training and agencies employed by CARE Act Funded agencies went up for Levels I and III over two years, however for Level II it went down.

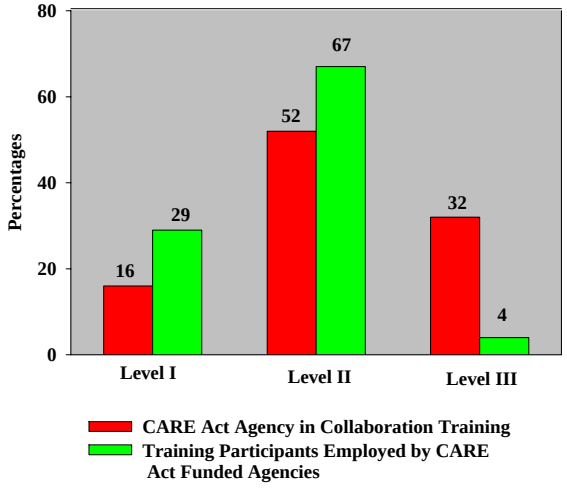

Figure 15 Percentage of participants in the organizations(2002-2003)

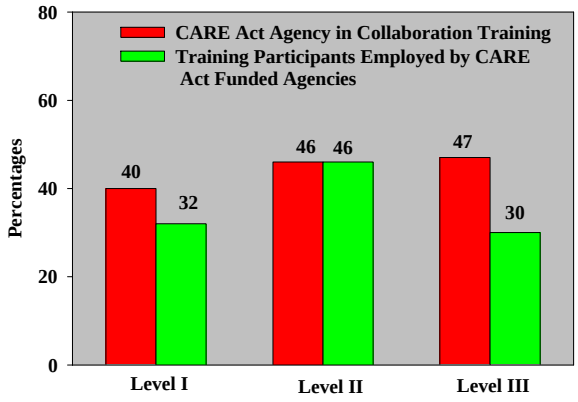

Figure 16 Percentage of participants in the organizations(2003-2004)

1.4. Clinical Consultations and Technical Assistance

Clinical consultations are an important feature of the AETC. Clinical consultations allow clinicians to consult with more experienced and often distant colleagues, enhancing the care of individual patients while bringing knowledge of the latest treatment approaches to the community level, even in areas with few other educational resources. These consultations can be carried out in person, by telephone, or by other distance-based means. During 2002-2003 grant cycle, the PA/MA AETC completed 429 Clinical Consultation Sessions (Level IV) and 912 sessions during 2003-2004 grant cycle (4-7). The results show that in person sessions decreased and the percentage of distance learning increased.

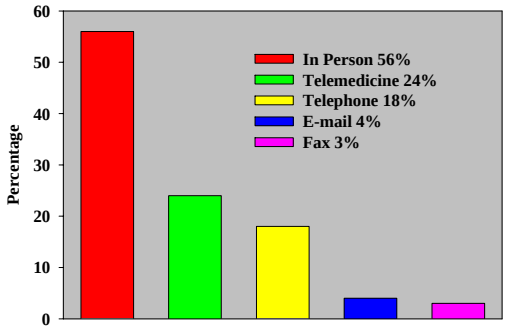

Figure 17 Percentage of Clinical Consultation Sessions Including the Use of Each Communications Modality (may include more than one modality) N=429 Clinical Consultations(2002-2003)

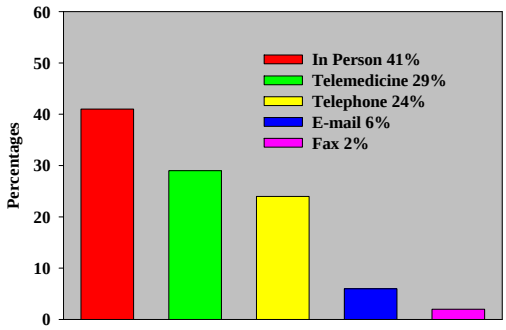

Figure 18 Percentage of Clinical Consultation Sessions Including the Use of Each Communications Modality (may include more than one modality) N=912 Clinical Consultations(2003-2004)

The majority of in-person clinical consultations are provided to small groups, such as seminars for providers, while most remote consultation sessions are for a single provider. Figures 1.4bI and 1.4bII illustrate the variability in time devoted to individual clinical consultations. Thirty-six percent of these number of clinical consultations sessions are 60 minutes or longer for 2002-2003 grant cycle and 18% for 2003-2004 grant cycle (4-7). The average length of clinical consultation sessions became shorter in the second year of the study.

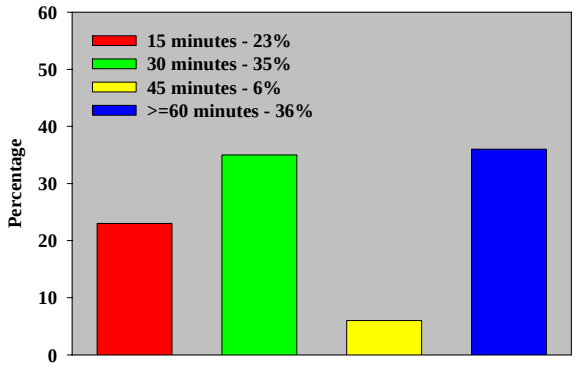

Figure 19 Clinical Consultation sessions by Duration of session Total Session Recorded=423(2002-2003)

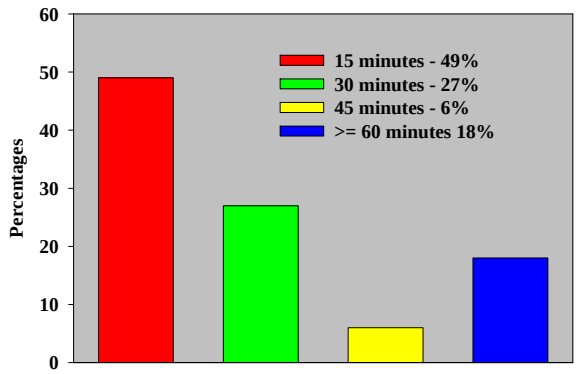

Figure 20 Clinical Consultation Sessions by Duration of Session Total Sessions Recorded=884(2003-2004)

1.5. Technical Assistance Activities

Technical assistance is the most complex and variable component of the AETC available training types, emphasizing assistance needs defined by the recipient. Most technical assistance is conducted through remote communications and is of short duration. Figures 5.1bI and 5.1bII show the breakdown of time devoted to technical assistance requests. During the 2002-2003 grant cycle 628 Technical Assistance encounters were provided by the PA/MA AETC and 842 encounters in 2003-2004 grant cycle (4, 5, 6, 8). The distribution of the modalities that are being used in these sessions remains similar between the two years.

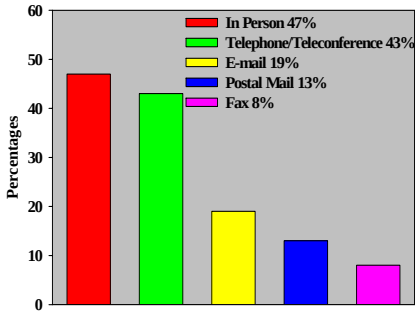

Figure 21 Percentage of Technical Assistance Sessions Including the Use of Each Communications Modality (may include more than one modality) N=628 Technical Assistance Sessions(2002-2003)

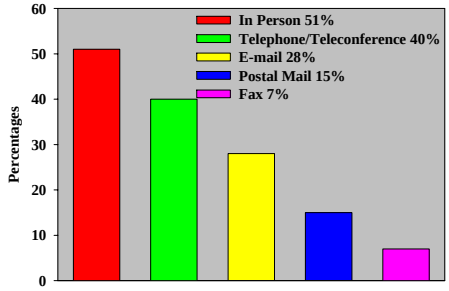

Figure 22 Percentage of Technical Assistance Sessions Including the Use of Each Communications Modality (may include more than one modality) N=842 Technical Assistance Sessions(2003-2004)

Figures 1.5bI and 1.5bII show that the largest percentage of Technical Assistance Sessions are at least 30 minutes and less than one hour. Most requests were fulfilled quickly. More than 50% of all requests were fulfilled in less than an hour (4, 5, 6, 8) for both years.

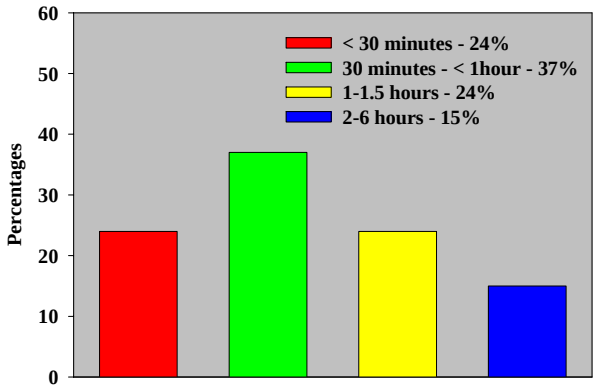

Figure 23 Technical Assistance by Duration of Session N=836 Events Recorded(2002-2003)

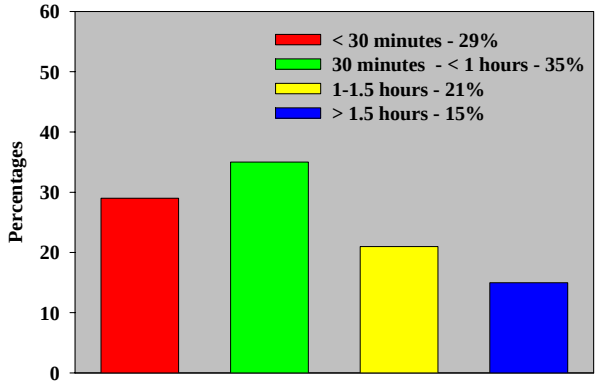

Figure 24 Technical Assistance by Duration of Session N=836 Events Recorded(2003-2004)

2. Section Two: Who is the PA/MA AETC Training?

As part of the overall mission to improve the accessibility and quality of care for HIV infection, the AETC concentrates on reaching out to professionals who have direct patient care responsibilities for HIV-infected individuals. They target providers caring for minority and vulnerable populations, particularly minority providers and those working at CARE Act-supported facilities. This section examines the participants in AETC training activities. Reflecting the emphasis on individual participants rather than training sessions (1).

2.1. Trainees by Profession and Training Level

The great majority of training participants are from professions with patient care responsibilities including those targeted by the AETC. Those with the most direct responsibilities for patient care (physicians and nurses) make up more than half of the program trainees. The AETC is primarily interested in targeting the top seven professions, which are physicians, physician assistants, advanced practice nurses, nurse practitioners, nurses, dentists and clinical pharmacists (professions bolded in the Table 2.1) (1).

The distribution by discipline is similar across Levels I, II, and III, with the exception of the percentage of physicians (those with the most direct responsibilities) in the second grant cycle, which is higher in the more clinically-based training (Level III) than in the classroom-based (Level I and Level II) training events. In the grant cycle 2003-2004, the percentage of physicians in Level I is 10%, Level II 11% and Level III 35%.

Table 2 Percentage Distribution of Trainees by Profession and Training Level (4-7)

	2002-2003 Grant Cycle				2003-2004 Grant Cycle			
	Level				Level			
	I	II	III	All	I	II	III	All
Physician	13%	9%	8%	10%	10%	11%	35%	11%
Physician Assistant	3%	2%	3%	3%	3%	2%	3%	2%
Advanced Practice Nurse	2%	1%	1%	1%	2%	1%	2%	1%
Nurse Practitioner	6%	5%	4%	5%	3%	4%	4%	4%
Nurse	32%	34%	26%	33%	27%	32%	35%	31%
Dentist	5%	3%	10%	4%	6%	2%	2%	3%
Other Dental Professional	7%	6%	13%	6%	9%	2%	2%	4%
Clinical Pharmacist	2%	1%	3%	1%	2%	2%	5%	2%
Mental Health Provider	4%	5%	10%	5%	3%	5%	1%	4%
Other Professions	18%	21%	16%	20%	18%	22%	7%	20%
Non-Health	8%	13%	6%	12%	14%	13%	3%	14%
Total	3,737	8,225	511	12,473	3,720	8,752	151	12,623

2.2. Race/Ethnicity of training participants

The AETC aim is to enhance the standard of care for minority populations by targeting minority providers for training opportunities. Training reached 7% of trainees across all levels who were of Hispanic origin in 2002-2003 and 6% in 2003-2004 (4-7). The distribution remains consistent across the years.

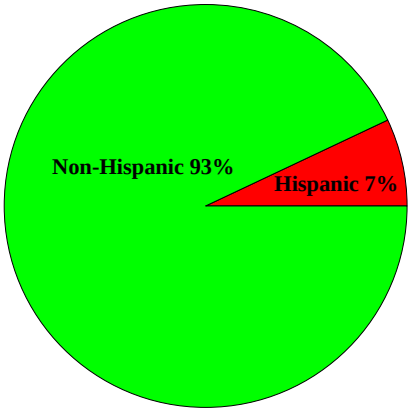

Figure 25 Ethnicity of Training Participants(2002-2003)

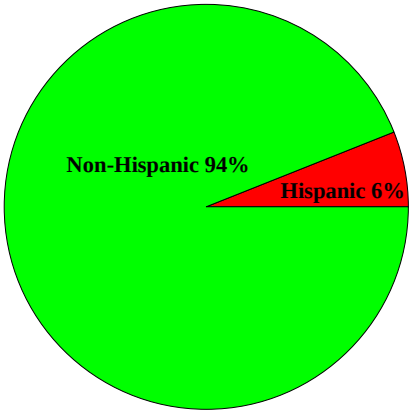

Figure 26 Ethnicity of Training Participants(2003-2004)

African-Americans made up a significant proportion of trainees representing more than quarter of participants across all levels. The smaller minority population of Asians contributed 5% in 2002-2003 and 6% in 2003-2004 to the total number of training participants, suggesting that AETC training is reaching representatives of this minority population among which the HIV epidemic is just beginning to draw attention (4-7). The distribution of race/ethnicity of training participants remains similar across both years.

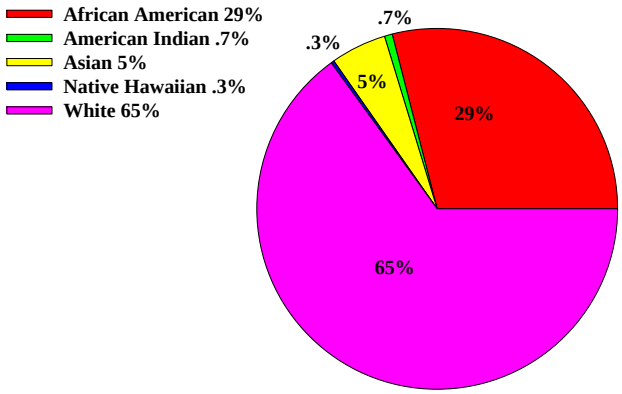

Figure 27 Race/Ethnicity of Training Participants N=12,762(2002-2003)

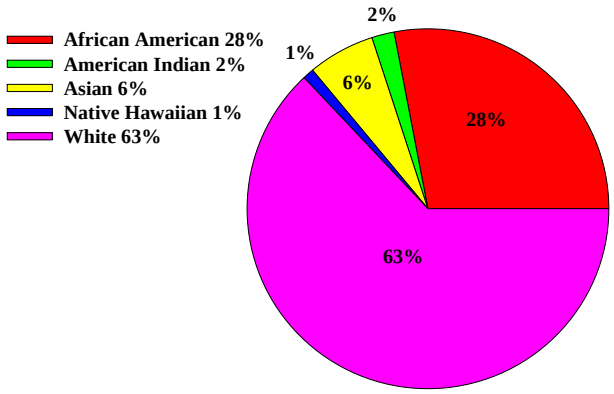

Figure 28 Race/Ethnicity of Training Participants N=12,502(2003-2004)

2.3. HIV-positive and antiretroviral medication caseloads for care providers/clinicians

The AETC aims to improve care by providing training for providers who treat HIV-positive patients, or are likely to do so in the future. Most participants report some current contact with HIV-positive patients: only 25% report that they do not for both years, although it is reasonable to suppose that they are in AETC training to prepare themselves for this possibility. They are also reaching a spectrum of low-through high-volume ART (antiretroviral treatment) providers. Approximately 75% of participants have direct contact with HIV-positive patients, and approximately 70% of training participants are managing one or more patients on antiretroviral medications for both years. The caseload profiles in terms of HIV-positive patients and antiretroviral patients are broadly similar (1, 4-7). The trends remain similar across both years.

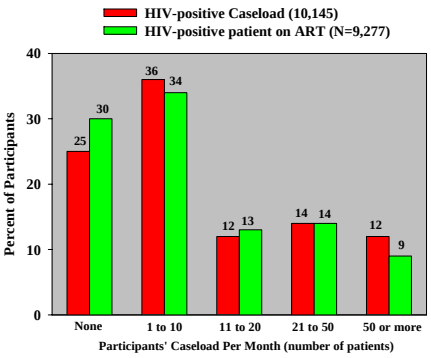

Figure 29 Participants' Caseload Per Month (number of patients)(2002-2003)

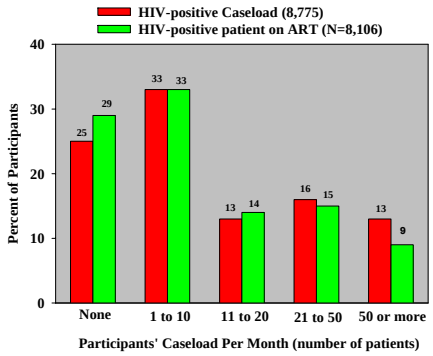

Figure 30 Participants' Caseload Per Month (number of patients)(2003-2004)

2.4. Clinical Consultation

Clinical consultations are a distinguishing feature of the AETC training programs. Figures 2.4I and 2.4II illustrate the distribution of professional discipline among participants who receive clinical consultation. As we might expect, physicians, who direct or supervise most care, are by far the largest single group of professionals represented among participants in clinical consultations, followed by nurses. The percentage of physicians increased from 53% to 72% and nurses decreased from 26% to 16 %, the distribution of other disciplines remained similar over the years. This indicates that AETC training is reaching the level where many key treatment decisions are made, and where training can provide the greatest returns in affecting quality of care (1, 5-8).

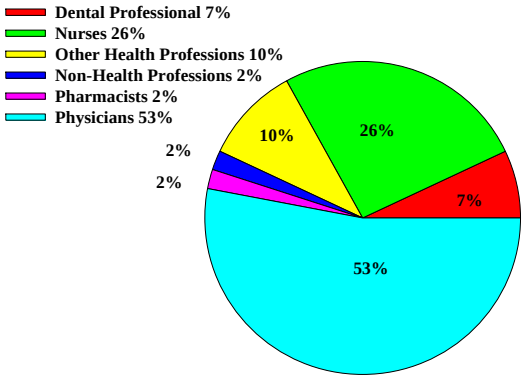

Figure 31 Discipline for Clinical Consultations N=768(2002-2003)

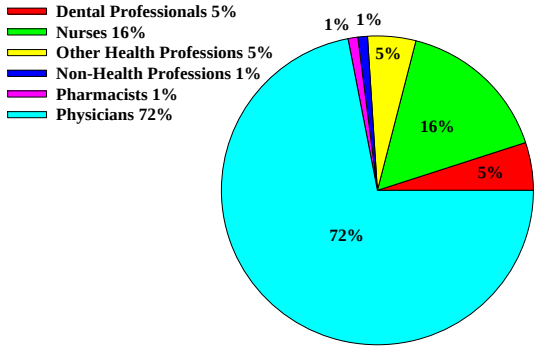

Figure 32 Discipline for Clinical Consultations N=901(2003-2004)

3. Section Three: Where are the PA/MA AETC Training Participants Employed?

We have examined who the AETC training participants are. However, this is only one component of providing care to underserved populations. The other component is ensuring that training is reaching providers employed in settings where these populations receive care. This section examines the settings where training participants are employed and provide care (1).

3.1. Principal employment settings by training levels

The profile of participants' employment settings includes a large number where underserved populations are most likely to be found and reached. Specifically 24% of participants in 2002-2003 grant cycle and 22% in 2003-2004 grant cycle are employed in community care settings where one might expect the underserved, especially the uninsured to seek care as shown in Figures 3.1aI and 3.1aII (5-7). The distribution of employment settings of the participants of Levels I, II and III remained similar across the years.

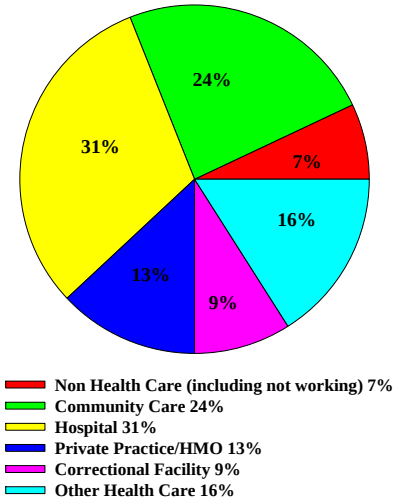

Figure 33 Employment Settings N=12,209(2002-2003)

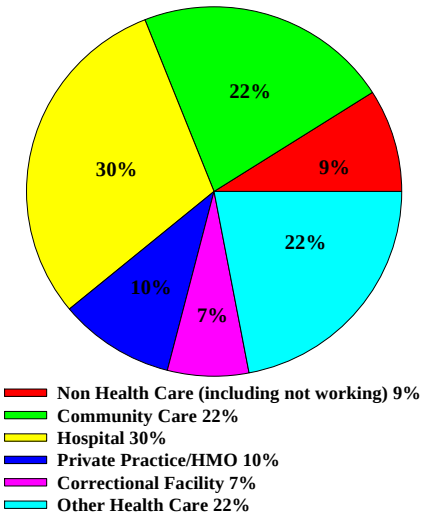

Figure 34 Employment Settings N=12,743(2003-2004)

As shown in Figures 3.1bI and 3.1bII, the majority of participants classified themselves as working in urban and suburban areas and 19% described themselves as working in rural areas for both years. Nonetheless, it is encouraging that a substantial number of AETC participants report working in rural areas, historically the areas least served by trained HIV providers (1, 5-8). The distribution of geographical locations of training participants remained similar across both years.

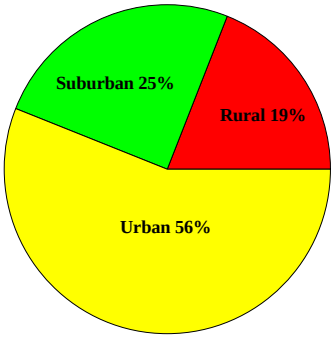

Figure 35 Geographical Locations of Training Participants (levels I, II, III) N=12,322(2002-2003)

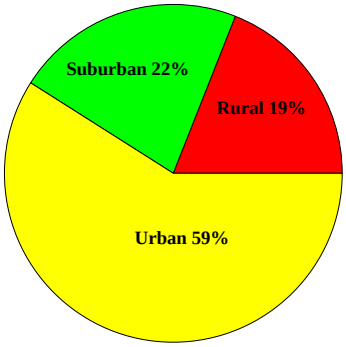

Figure 36 Geographical Locations of Training Participants (level I, II, III) N=11,796(2003-2004)

3.2. Clinical consultation: Principal employment settings, organizational features and geographic features

Figures 3.2aI and 3.2aII illustrate the distribution of principal employment settings for recipients of AETC clinical consultations (5-8). Correctional facilities and hospitals have the highest frequency for both years. The distribution of employment settings of recipients of clinical consultations remains similar over the two years.

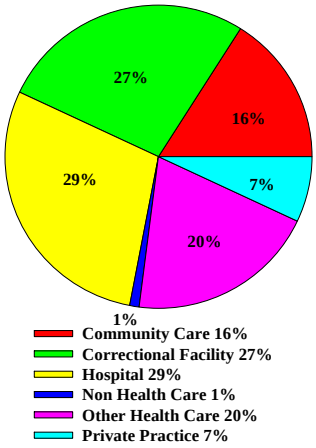

Figure 37 Employment Settings of Recipients of Clinical Consultations N=780(2002-2003)

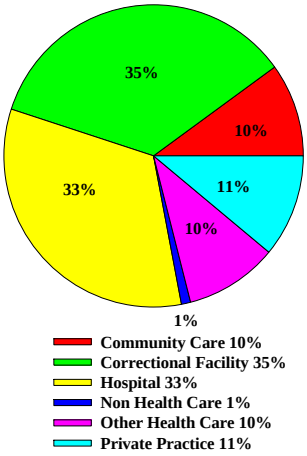

Figure 38 Employment Settings of Recipients of clinical Consultations N=880(2003-2004)

The distribution of the geographic locations of those receiving clinical consultations is similar with the distribution of Levels I, II and III (5-8). The distribution also remains similar over the two years, with urban increasing slightly.

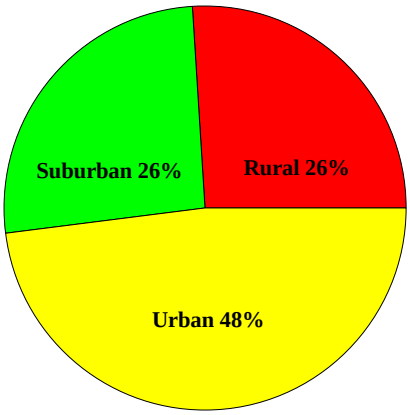

Figure 39 Geographic Location of Participants Receiving Clinical Consultations N=772 Participants(2002-2003)

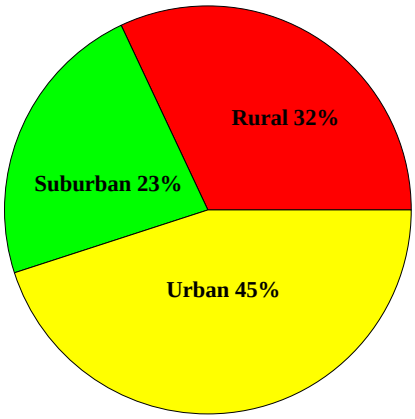

Figure 40 Geographical Location of Participants Receiving Clinical Consultations N=880 Participants (2003-2004)

3.3. Technical assistance: Principal employment settings, organizational features and geographical features

Similar to the use of AETC training and clinical consultations, many requests for technical assistance come from community-based organizations and hospitals. A difference between technical assistance requests and clinical consultations is the technical assistance participants' higher level of representation from "other" health settings. The distribution of employment settings of organizations receiving technical assistance is similar over the two years.

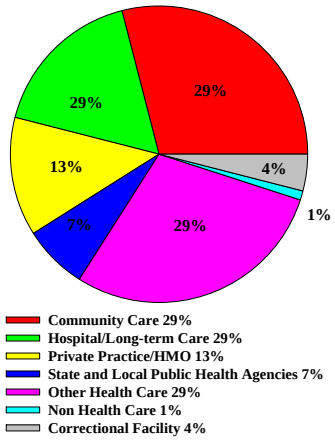

Figure 41 Employment Settings of Organizations Receiving Technical Assistance N=625(2002-2003)

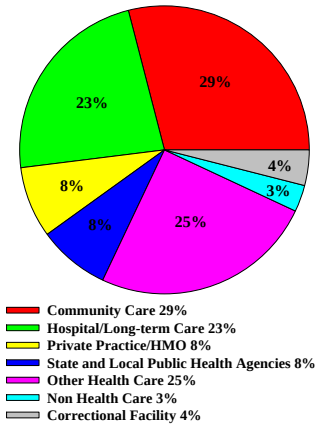

Figure 42 Employment Settings of Organizations Receiving Technical Assistance N=832(2003-2004)

The distribution of geographical origins of technical assistance requests is similar to the distribution of Levels I-IV. The distribution of origins of technical assistance requests is also similar across the years.

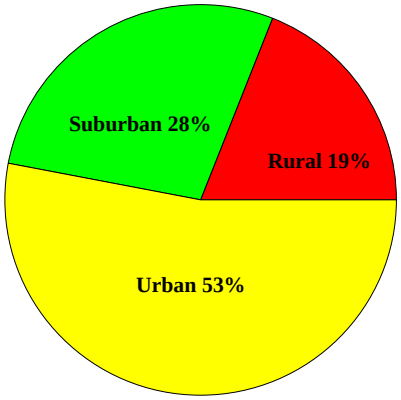

Figure 43 Geographical Origins of Technical Assistance Requests N=478 Request(2002-2003)

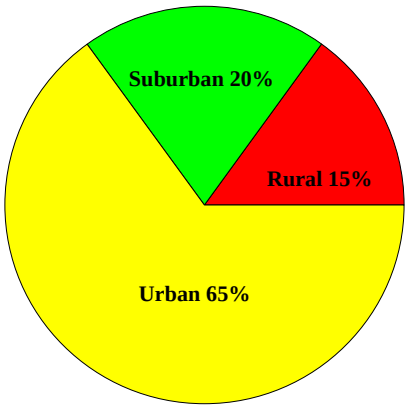

Figure 44 Geographical Origins of Technical Assistance Requests N=828 Requests(2003-2004)

4. Section Four: What Type of Clients do the PA/MA AETC Training Participants Serve?

Prior sections have examined the AETC trainees. Section Four examines who trainees' patients and clients are. It summarizes participants' client caseloads in terms of underserved and vulnerable populations.

Training programs are important in meeting the HIV/AIDS Bureau's central objective of overwhelming barriers to accessing medical care for underserved populations. Training does this by improving the skills of providers who are already caring for traditionally underserved populations, populations who have historically had little access to adequate medical care generally and to quality HIV care specifically. AETC training programs not only improve the HIV-related skills of these providers, but also provide training to enhance their skills in working with these populations. Training curriculum as a whole equips providers with the knowledge to treat HIV disease, and the skills to enhance patient satisfaction and adherence to the treatments. (1)

4.1. Caseload of vulnerable and underserved populations

Participants in AETC training care for a wide variety of special populations. Therefore, only those participants with direct patient care responsibilities were examined. The following charts show that the distribution of the proportions of caseloads from special populations remained similar across both years. Those participants who reported that 25% or more of their caseload were from a particular underserved or high-risk group were classified as having a "high volume" caseload from that group. Approximately 70% of trainees reported having "high" caseloads from one or more racial/ethnic minorities. 51% of participants reported that they are seeing uninsured persons. The ability of AETC training to reach providers serving large numbers of patients with complex medical and psychosocial needs is shown by the fact that approximately 22% serve "high" caseloads of persistently mentally ill, 48% of substance users and 19% of incarcerated individuals (1, 5-7).

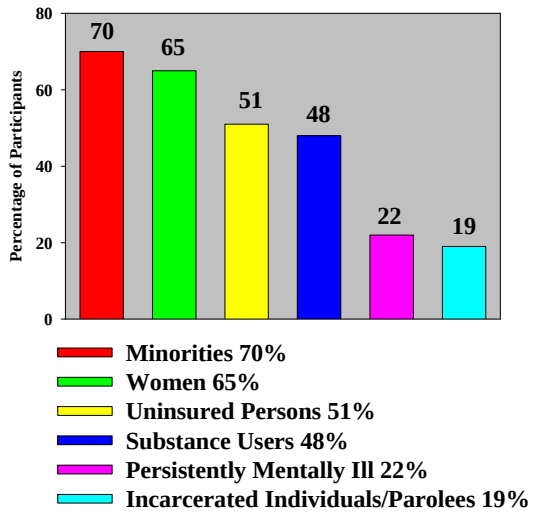

Figure 45 Proportion of Caseloads(2002-2003)

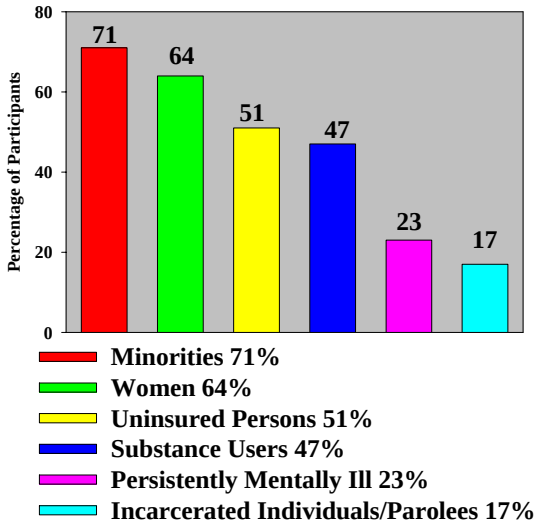

Figure 46 Proportion of Caseloads(2003-2004)

5. Section Five: What is the Content of the PA/MA AETC Training Programs?

The central training objective of the AETC program is to improve the skills of treatment providers so that they provide high-quality, up-to-date HIV medical care that conforms to Public Health Service treatment guidelines. Clinical management topics are the main focus of the AETC training, as these most directly affect patient care. Section Five summarizes the distribution of training topics for the AETC training events (1).

5.1. Leading topics

This section is based on questions we asked staff of AETC training programs, about topics their programs covered. Faculty were asked, for each program, to identify the "top three topics" included in the program from a list of 52 topics. From these, eight topics were selected that were most frequently included in these "top three topics", and refer to them as the "leading" topics. In the Levels I, II and III, the two most frequently covered topics were Clinical Manifestations of HIV and Antiretroviral Treatment for both years (4-6).

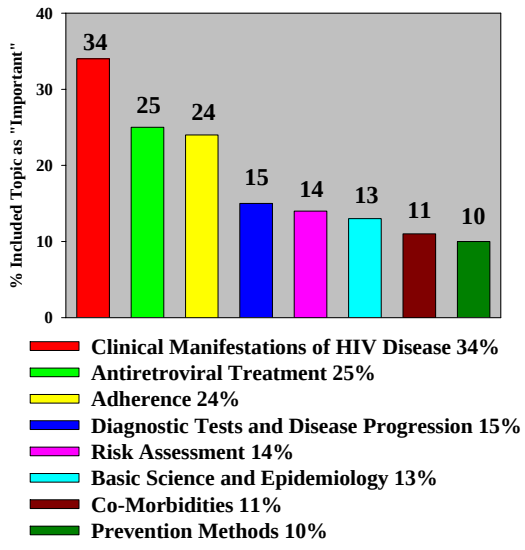

Figure 47 Leading Topics (levels I, II, III)(2002-2003)

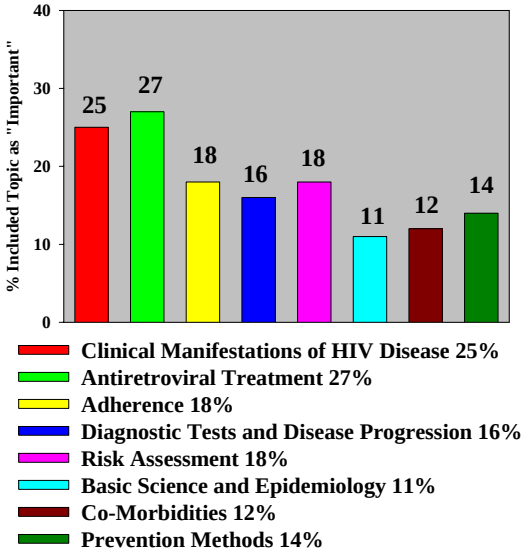

Figure 48 Leading Topics (levels I, II, III)(2003-2004)

The basic order of training topics is similar across all three training levels, but "clinical manifestations of HIV" are particularly likely to be among the three most important topics for clinically-based (Level III) training events (4-6).

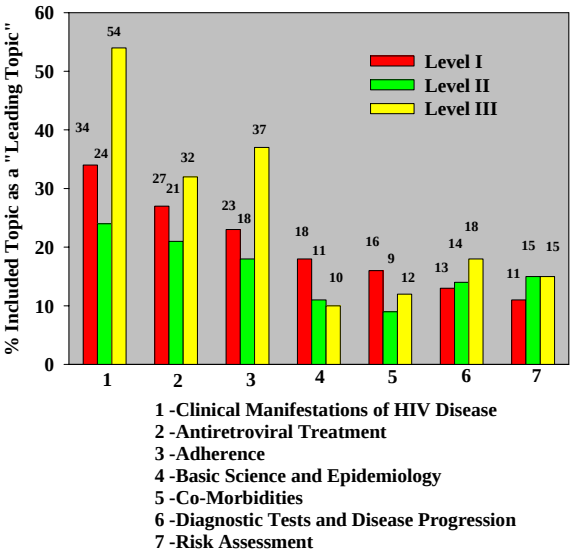

Figure 49 Leading Topics(2002-2003)

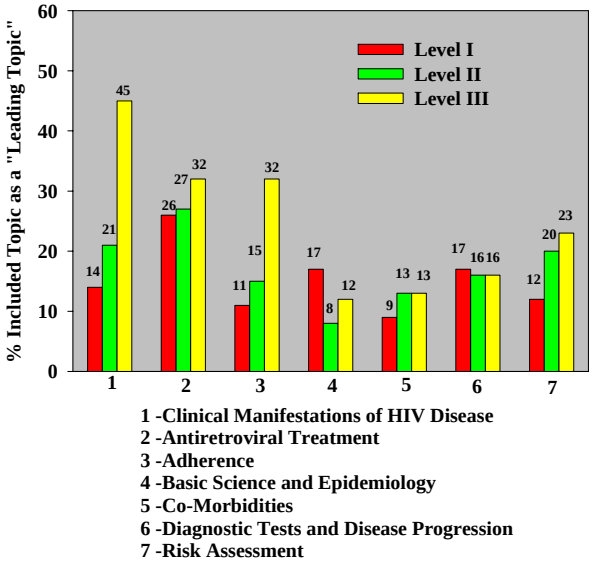

Figure 50 Leading Topics (2003-2004)

5.2. Leading topics of clinical consultations questions and technical assistance requests

Similar to the topics in Levels I, II and III, the questions discussed in clinical consultations emphasize clinical management. The most frequently asked questions deal with antiretroviral therapy, clinical manifestations of HIV, and diagnostic tests and disease progression for both years (5, 6, 8). There was a slight increase in the percentage for both topics.

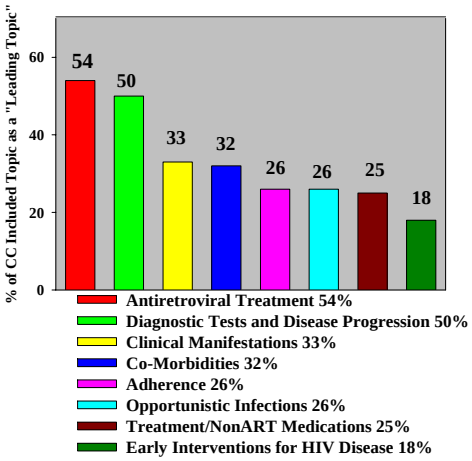

Figure 51 Leading Topics of Clinical Consultations(2002-2003)

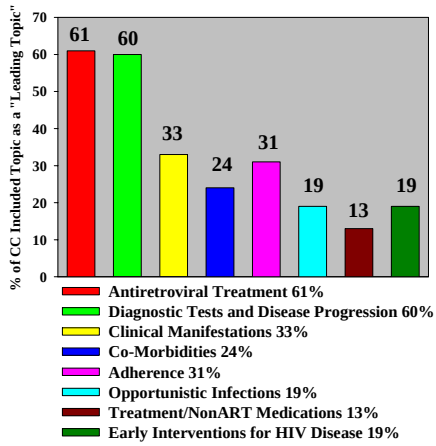

Figure 52 Leading Topics of Clinical Consultation(2003-2004)

Whereas AETC training events and clinical consultations aim to improve the knowledge and skills of individual treatment personnel, technical assistance aims to enhance the ability of organizations as a whole to deliver treatment and support individual treatment providers. The content of technical assistance requests are quite varied, but they complement the clinical management focus of individual provider training and consultation activities. The two most frequently requested topics are the organizational development (community linkages) and educational programming (design) for both years (5, 6, 9).

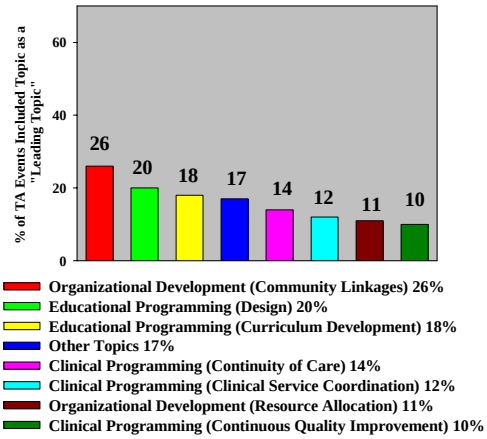

Figure 53 Leading Technical Assistance Requests(2002-2003)

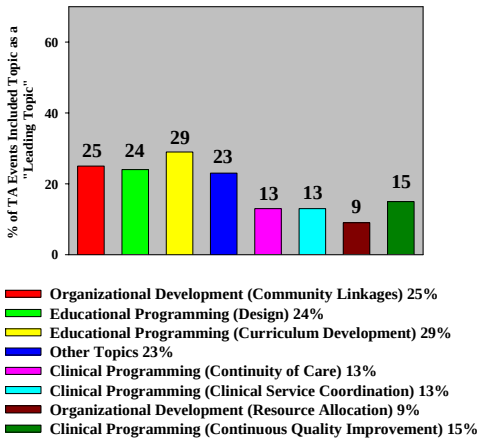

Figure 54 Leading Technical Assistance Requests(2003-2004)

6. Section Six: Supporting the Mission of the Ryan White CARE Act

As the professional education arm of the Ryan White CARE Act, the overreaching mission of the AETC program is to increase access to quality medical care for HIV infected individuals from medically underserved populations and communities throughout the United States. The AETC supports this mission through implementation of training objectives that:

1. Target training activities to staff of Ryan White CARE Act funded agencies and other providers that provide medical care to underserved and vulnerable populations:
2. Enhance providers' skills to recruit and retain in treatment underserved populations;
3. Train providers, who already work with underserved populations, in the latest medical knowledge and clinical techniques.

This concluding section presents training activity statistics that describe the scope and range of AETC training activities that are responsive to these training objectives. The AETC makes its most direct contribution in achieving these objectives by training individuals who have patient care responsibilities (1).

6.1. Objective 1: Training Ryan White and other providers who provide medical care to underserved and vulnerable populations

The AETC reaches large numbers of treaters working in agencies funded by the CARE Act. AETC collaboration with agencies funded under various Titles of the CARE Act is quite common. A large proportion of patients cared for by AETC trainees are from vulnerable populations. The largest percentage of special populations served is minorities and women for both years.

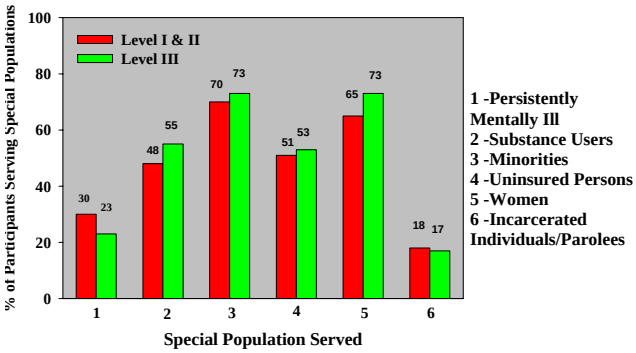

Figure 55 Percent of Direct Care Participants with 25% or More Patients(2002-2003)

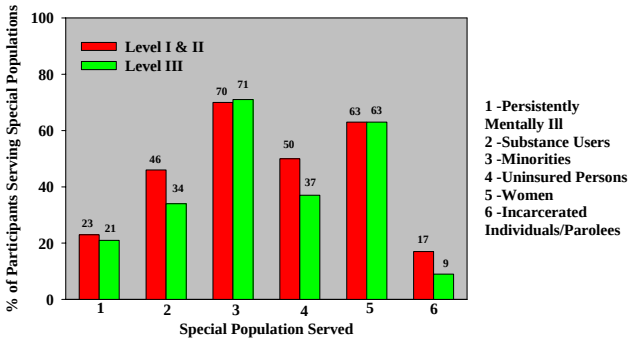

Figure 56 Percent of Direct Care Participants with 25% or More Patients(2003-2004)

AETC participants with direct care responsibilities, who work for Ryan White CARE Act funded agencies, care for an even larger concentration of minority, substance users and uninsured persons. The largest percentage of special populations served is minorities, women and uninsured for both years.

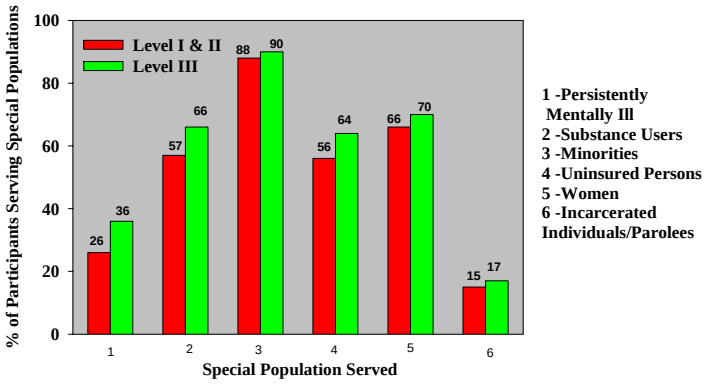

Figure 57 Percent of Direct-care CARE-act-funded Training Participants with 25% or More of Their Patients(2002-2003)

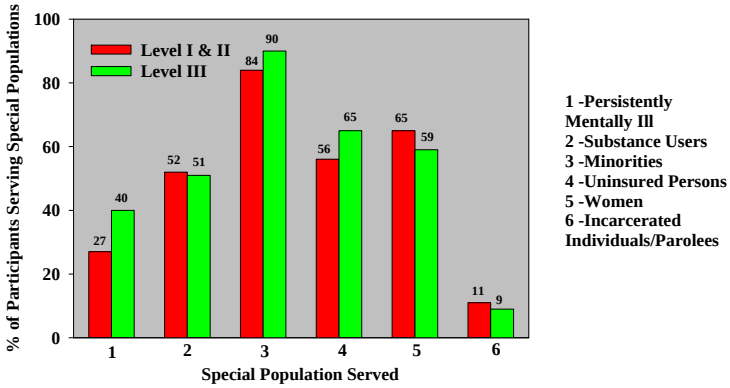

Figure 58 Percent of Direct-care CARE-act-funded Training Participants with 25% or More of Their Patients(2003-2004)

For both grant cycles approximately 75.5% of all direct-care participants and 89.5% of those from CARE Act funded agencies were treating HIV patients at the time of the AETC training (5-7).

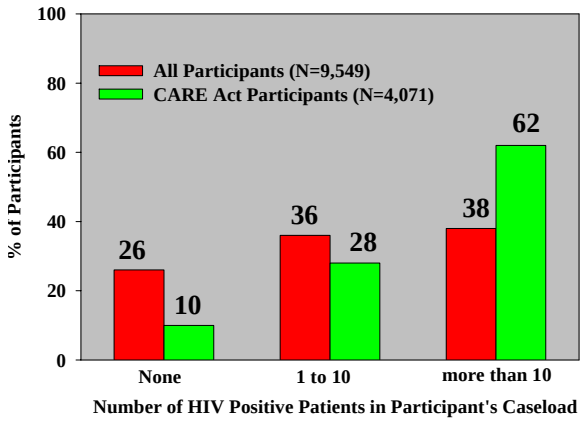

Figure 59 HIV Positive Caseloads of Direct-Care Participants(2002-2003)

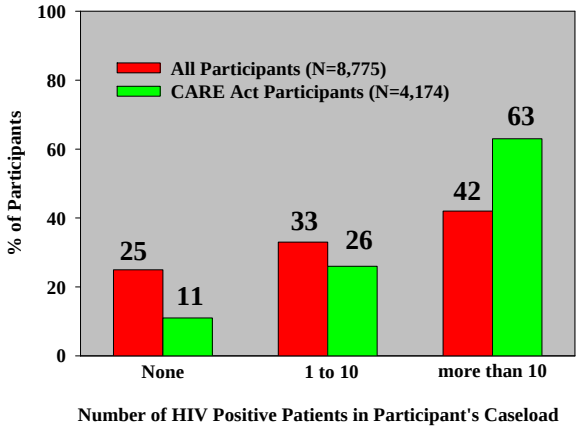

Figure 60 HIV Positive Caseloads of Direct-Care Participants(2002-2003)

Not only are CARE Act providers responsible for larger HIV-positive caseloads than other AETC trainees, but they also manage HIV patients over a broader spectrum of disease progression. Trainees from CARE Act funded agencies are more likely than other trainees to manage patients through all the stages of HIV disease, rather than referring out to other providers. Among the CARE Act agency treaters, 59% handle all stages of HIV disease, versus 43% for all direct care providers in the 2002-2003 grant cycle and 60% handle all stages of HIV disease, versus 45% for all direct care providers in the 2003-2004 grant cycle (5-7).

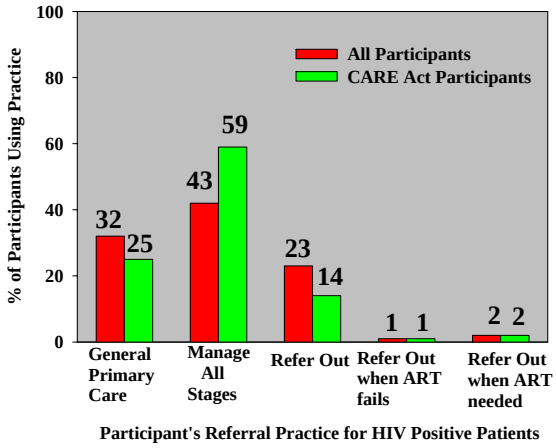

Figure 61 Referral Patterns of Direct-Care Participants(2002-2003)

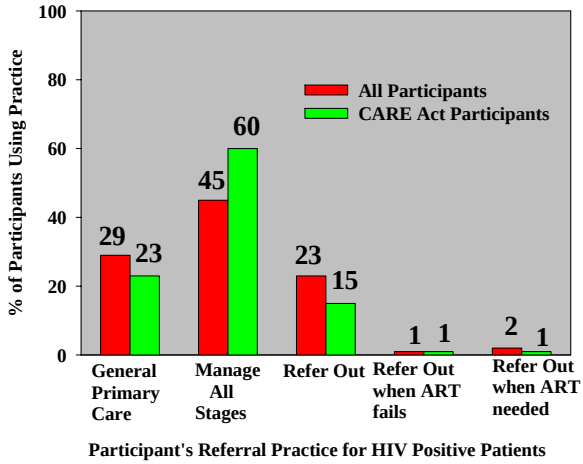

Figure 62 Referral Patterns of Direct-Care Participants(2003-2004)

6.2. Objective 2: Enhancing providers' ability to recruit and retain in treatment patients from underserved populations

A first step in improving the quality of care that is accessible to underserved population is to attract HIV infected individuals from such populations. Figures 6.2aI and 6.2aII show that 91% of the participants said that they see patients from at least one of the special populations in the 2002-2003 grant cycle and 97% in the 2003-2004 grant cycle (1, 4-7). The percentage of events devoted to special populations increased over the two years. It went from 30% in the first grant cycle to 50% in the second grant cycle.

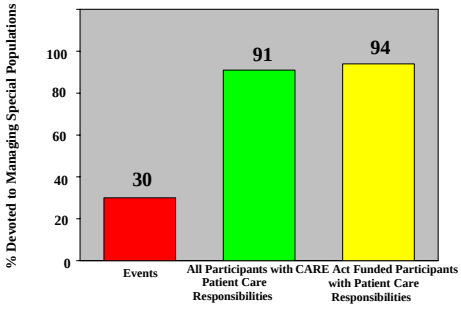

Figure 63 Percent of Events and Direct-Care Participants Devoted to Managing Special Populations Total Events N=846 All Participants N=10,760 CARE Act Participants N=4,305(2002-2003)

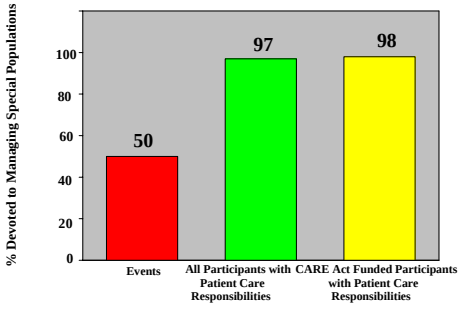

Figure 64 Percent of Events and Direct-Care Participants Devoted to Managing Special Populations total events N=834 All Participants N=9,596 CARE Act Participants N=4,370(2003-2004)

Many clinicians are not well versed in the specific cultural and social issues that affect an HIV-infected individuals seeking and staying in medical care. To meet this training need, the AETC conducts training events that address clinical management topics that arise when managing patients from specific racial and ethnic minorities, the specific problems confronting women and persistently mentally ill, incarcerated people and substance users (1, 4-7). The distribution of percent of events and participants devoted to managing special populations is similar across the years.

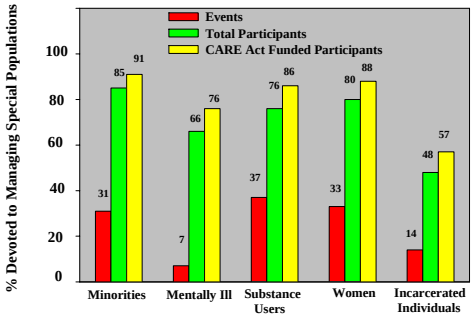

Figure 65 Percent of Events and Participants Devoted to Managing Special Populations(2002-2003)

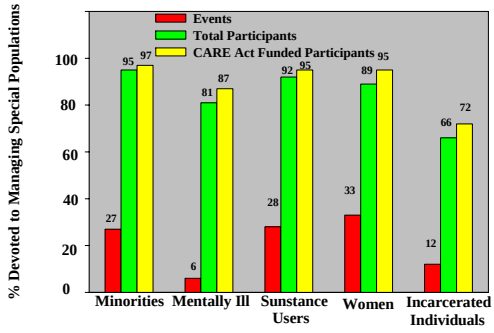

Figure 66 Percent of Events and Participants Devoted to Managing Special Populations(2003-2004)

6.3. Objective 3: Training providers for vulnerable populations in the latest medical techniques

Not only must providers be comfortable and competent in handling patients from diverse populations, they must also have up-to-date knowledge and clinical management skills if they are to provide quality HIV medical care. AETC training enhances clinicians' skills by providing clinically based training on practical aspects of managing HIV care. Eighty-nine percent of training events of Level III (clinically based level of training) concentrates on clinical management topics in the 2002-2003 grant cycle and 97% in 2003-2004 grant cycle. Another key topic in AETC training is adherence to medications of which 84% of clinically based events (Level III) devote time to medication adherence in the 2002-2003 grant cycle and 91% in the 2003-2004 grant cycle (1, 4-6).

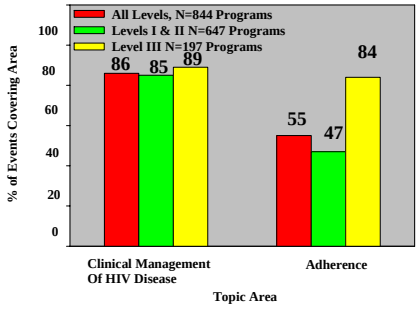

Figure 67 Percent of Training Events Covering Major Topic Area, by Training Level(2002-2003)

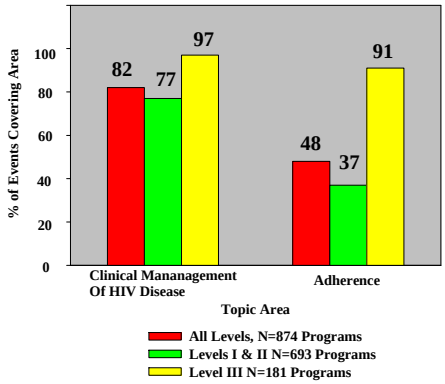

Figure 68 Percent of Training Events covering Major Topic Area, by Training Level(2003-2004)

Conclusion

PA/MA AETC – Two Study Years Comparison

This section describes the comparison of the administration of PA/MA AETC program during the 2002-2003 and 2003-2004 grant cycles, which will be referred to as the first and second grant cycle respectively.

During the analyzed period, there was a 3% increase in the number of Levels I, II and III training programs (from 847 to 877 events). This increase was accompanied by the 4% decline in the number of participants (from 16,710 to 16,028 individuals). The most significant decline in the number of unduplicated counts of trained individuals – from 613 to 248 participants – occurred at the Level III, while the distribution for Levels I and II was similar in both years. Additionally, there was a 6% increase of participants who have taken AETC training and chosen to return for another training event.

Summary of the data for the reviewed grant cycles also shows that the number of clinical consultation Level IV sessions more than doubled from 429 to 912 events. For the second grant cycle, there was a statistically significant increase in percentage of distance, rather than in-person, clinical consultation encounters (χ^2 =27.44 and p-value < 0.001), and a statistically significant decrease in the duration of the sessions (χ^2 =92.25 and p-value < 0.001). Finally, the number of Level V technical assistance sessions has also increased from 628 to 842 events. The methods and session durations for Level V were similar across two years.

The main seven health professions targeted by the AETC are physicians, physician assistants, advanced practice nurses, nurse practitioners, nurses, dentists and clinical pharmacists. Physicians and nurses, those professions that have the most direct responsibilities for patient care, make up more than half of the program participants. Race and ethnicity of training participants during the two years remained the same, as well as participants' HIV-positive and ART caseload per month.

While the distribution of participants by profession has been similar across all training levels, one notable exception was the distribution of physicians in the second grant cycle. The percent of physicians in the more clinically-based Level III training is higher (35%) than in the classroom-based Levels I and II training events (10% and 11% respectively) in the second grant cycle. This is a pronounced difference from the first grant cycle, when physicians accounted for only 8% of Level III participants. There also was a statistically significant increase (19%) in the

number of physicians who attended Level IV clinical consultation sessions (χ^2 =110.68 and p-value < 0.001). This indicates that AETC training is reaching care providers who direct or supervise most care and suggests physicians look for guidance in managing their challenging cases through clinical consultations.

The employment settings and geographical location distribution remained constant for two years for Levels I, II, III, IV, V. The largest percentage of participants are employed in the hospitals and community care, which makes up approximately 30% in each setting. This indicates that AETC is successful in reaching providers from employment settings where many key treatment decisions are made and where patients from special populations can be found. Also, the majority of participants classified themselves as working in urban areas with approximately 57.5% for Levels I, II and III, 46.5% for Level IV, and 59% for Level V. This matched the geographic distribution of HIV patients, the majority of whom live in urban areas.

The distribution of special populations served is similar over the two years. Minorities and women were the two most frequently served groups, which also matches the epidemic statistics. In addition, percentage of training events devoted to covering special populations topics increased from 30% in the first year to 50% in the second year. This was likely due to the increase of the incidence of HIV disease in the special populations. Almost all direct care participants have responsibilities managing special populations.

The distribution of topics at every training level was similar across the two grant cycles, with slight changes at Level V. Clinical Management topics are the main focus of the AETC training events, since they most directly affect patient care. The most frequently covered topics included clinical manifestations of HIV disease and antiretroviral treatment at the Levels I, II and III, and antiretroviral treatment and diagnostic tests and disease progression at Level IV. For Level V, Organizational Development (Community Linkages) was one of the two most frequently discussed topics during both grant cycles, while Educational Programming (Design) and Educational Programming (Curriculum Development) were the second most frequently discussed topic during the first and second grant cycles respectively. This change at Level V was likely the result of the changes in treatment guidelines set by the Office of Health and Human Services (OHHS).

The last section explores how the AETC supports the mission of the Ryan White CARE Act. AETC reaches a large number of care providers working in agencies funded by the CARE Act. While organizations offering management of all stages of HIV disease is the largest group for both CARE Act funded and non-funded agencies, a higher proportion (approximately 59%) of the CARE Act funded agencies fall in this group as compared with the non-funded agencies (44%). In addition, providers who work for Ryan White CARE Act funded agencies serve a higher special populations caseload. For example, approximately 88% of participants from the CARE Act funded agencies serve minorities, versus 71% of all AETC participants.

In conclusion, the most important changes that were found over two years were the following:

1) a decrease in the number of Level III participants;
2) an increase in the number of clinical consultation sessions;
3) an increase in the number of technical assistance sessions;
4) an increase in the percentage of physicians attending clinical consultation sessions.

All of these changes suggest that the healthcare providers, and in particular physicians, served by the PA/MA AETC during the 2002-2004 period sought more guidance of the form provided by Level IV (Clinical Consultation) and Level V (Technical Assistance) programs. There also seemed to be a reduced demand for Level III (clinically-based hands-on training) during the same period among non-physicians. This, perhaps, suggests that non-physicians felt that Level III training was too advanced for their current needs.

Comparison of PA/MA AETC to the National Data

Table 2.1 below illustrates the comparison of PA/MA AETC programs to the national data (5). PA/MA data describes the program during the 2002-2004 period. The national data contains the values for the programs administered through 11 centers, including PA/MA AETC, during the 2000-2001 period.

The data analysis demonstrates a statistically significant difference ($\chi 2 = 165$ and p-value < 0.001) in the fact that PA/MA AETC gave greater emphasis to Level II trainings, whereas the national data shows a greater emphasis on Level I trainings. Statistically significant difference ($p<0.001$) was also found for the total number of participants, which is greater for Level II for PA/MA AETC versus Level I nationally. In addition, both the PA/MA AETC and national data show that the largest proportion of training hours were spent in Level III programs.

Table 3 (comparison of PA/MA AETC to the national data)

Variable	National Data (2000-2001)	PA/MA Data (2002-2004)
Training Events		
Level 1	41%	23%
Level 2	32%	55%
Level 3	27%	22%
Total Training Hours		
Level 1	13%	12%
Level 2	19%	36%
Level 3	68%	52%
Total Number of Participants		
Level 1	54%	30%
Level 2	40%	67.5%
Level 3	6%	2.5%

Examining training methods and materials for both the PA/MA and national data shows that the largest percentage of training events (Levels I, II, III) and clinical consultation sessions

(Level IV) employ in-person modality. For PA/MA AETC, 86% of training events used in-person modality as compared with 80% for the national data. For clinical consultation, 48.5% of PA/MA AETC sessions used in-person modality as compared with 43% for the national data. However, for technical assistance (Level V) requests, the largest proportion of modality used in PA/MA AETC was in-person presentations (approximately 49%), but for the national data the most frequent requests involved e-mail, internet or fax (59%).

The data for PA/MA AETC and the national programs demonstrates a number of similarities, including:

- More than half of the participants both in PA/MA AETC and nationally were those with the most direct responsibilities for patient care (physicians and nurses);
- Whites constituted 64% of participants in both data sets, with African-Americans accounting for less than a third (24% and 28.5% respectively);
- Hospitals and community care organizations were the most frequent employment settings;
- Urban and suburban areas were most frequent geographic locations;
- Both PA/MA AETC and national programs reach a large number of providers that serve special populations;
- Both PA/MA AETC and national programs reach a large number of providers working for Ryan white CARE Act funded agencies;
- Women and minorities were the highest special population groups served;
- Both data sets note that antiretroviral treatment was the most frequent topic for clinical consultation sessions (Level IV), 57% for PA/MA AETC and 57.5% nationally.

Finally, some differences are observed in the top topics covered by the programs. The leading topic for Levels I, II and III is antiretroviral treatment (40%) for the national data and clinical manifestations of HIV disease (29.5%) for PA/MA AETC. The second leading topic is clinical manifestations of HIV disease (37%) for national data and antiretroviral treatment (26%) for PA/MA AETC.

The preceding comparison of PA/MA AETC to the national data shows few striking or truly important differences between the two data sets. This suggests that the program of work of the PA/MA AETC is largely consistent with the training activities that are carried out in the other 10 regionally-based AETCs.

APPENDIX

Appendix A: Participant Information Form

18026

Pennsylvania/Mid-Atlantic AIDS Education and Training Center
PARTICIPANT INFORMATION FORM N

Date:

To create your unique ID number, use the month of your birth, the day of your birth, and the **last four digits of your social security number**.
For example, May 29 and 123-45-6789: ID number is 05-29-6789

Birthmonth - Birthday - Last 4 SSN

Title of Program:

Your Name _____

(Work) Street Address _____

City _____ State _____ Zipcode _____

Email Address _____ Fax # _____

1) Your profession/discipline. (select one)

- ○ 1) Physician
- ○ 2) Physician Assistant
- ○ 3) Advanced Practice Nurse
- ○ 4) Nurse Practitioner
- ○ 5) Nurse
- ○ 6) Dentist
- ○ 7) Other Dental Professional
- ○ 8) Clinical Pharmacist
- ○ 9) Mental Health Provider
- ○ 10) Substance Abuse Professional
- ○ 11) Other Health (specify) _____
- ○ 12) Non-health (specify) _____

2) Your primary funtional role. (select one)

- ○ 1) Administrator/Supervisor
- ○ 2) Care Provider
- ○ 3) Case Manager
- ○ 4) Researcher
- ○ 5) Resident
- ○ 6) Student/Graduate Student
- ○ 7) Teacher/Faculty
- ○ 8) Other (specify)
- ○ 9) Not working

3) Your principal employment setting.

- ○ 1) Hospital or Hospital Based Clinic
- ○ 2) Community/Migrant Health Center
- ○ 3) Community Mental Health Center
- ○ 4) Substance Abuse Treatment
- ○ 5) Other Community Based Org(CBO)
- ○ 6) STD/Family Planning Clinic
- ○ 7) Tribal/Indian Health Service
- ○ 8) Other Public Health Agency
- ○ 9) HMO/Managed Care
- ○ 10) Solo/Group Private Practice
- ○ 11) Correctional Facility
- ○ 12) Other Health Care
- ○ 13) Non Health
- ○ 14) Not Working

4) Zipcode of your Principal Employment Setting

○ Urban ○ Suburban ○ Rural

5) Does the agency that you consider you principal employer receive Ryan White Care Act funding? ○ 1) Yes ○ 2) No ○ 3) Don't Know

Please write the full name of your employer. _____

6) Your racial/ethnic background. (select all that apply)

- ○ 1) African American/Black
- ○ 2) American Indian/Alaska Native
- ○ 3) Asian
- ○ 4) Caucasian
- ○ 5) Native Hawaiian/Other Pacific Islander

6a) Are you of Hispanic, Latino, or Spanish Origin? ○ Yes ○ No

7) Your gender. ○ Female ○ Male

8) Which of the following most accurately describes the way in which you or your unit currently provide services for HIV/AIDS patients?

- ○ 1) Not applicable/I do not see patients
- ○ 2) Refer HIV+ patients to another provider for treatment
- ○ 3) Provide general primary care to HIV+ patients
- ○ 4) Refer HIV+ patients when they need antiretroviral treatment
- ○ 5) Refer HIV+ patients when they fail antiretroviral treatment
- ○ 6) Provide services throughout the course of the disease

Answer questions #9-16 ONLY if you have direct client/patient care responsibilities.

9) Estimate the NUMBER of HIV+ clients/patients you have personally seen in your practice in the past month.

○ None ○ 1-10 ○ 11-20 ○ 21-50 ○ 51+ ○ Don't Know

10) Of your HIV+ clients/patients estimate the NUMBER you have personally seen in the past month who are on antiretroviral therapy.

○ None ○ 1-10 ○ 11-20 ○ 21-50 ○ 51+ ○ Don't Know

Estimate the total PERCENTAGE of ALL OF YOUR clients/patients in the past 12 months who are:

	None	1-24%	25-49%	50+%	Don't Know
11) Racial and/or Ethnic Minorities.	○	○	○	○	○
12) Severely/Persistently Mentally Ill Persons	○	○	○	○	○
13) Substance Users	○	○	○	○	○
14) Uninsured Persons	○	○	○	○	○
15) Women	○	○	○	○	○
16) Incarcerated Inividuals/Parolees	○	○	○	○	○

If you are receiving accreditation for attending this program please provide your social security number so that we may issue proper credit.

___ - ___ - ____

13 AETC | Subsite | Program | Agency

Yes No DK RWCA

Level I ○ Level 2 ○ Level 3 ○ Level of Program

18026

Pennsylvania MidAtlantic AETC- July 2003

18026

For each of the following statements please indicate whether you Agree Strongly, Agree Mildly, Disagree Mildly, or Disagree Strongly.

	Disagree Strongly			Agree Stongly
1) The overall program met the stated objectives.	○ 1	○ 2	○ 3	○ 4
2) The program content met my own learning objectives.	○ 1	○ 2	○ 3	○ 4
3) The program format was conducive to my learning.	○ 1	○ 2	○ 3	○ 4
4) The expertise of the program faculty contributed to improving my learning.	○ 1	○ 2	○ 3	○ 4
5) I intend to participate in additional Pennsylvania/MidAtlantic AETC training programs.	○ 1	○ 2	○ 3	○ 4
	Disagree Strongly			Agree Strongly
6) The training program has improved my knowledge and skills in the management of HIV/AIDS patients.	○ 1	○ 2	○ 3	○ 4
7) The training program content I received has changed how I intend to manage my patients with HIV disease.	○ 1	○ 2	○ 3	○ 4
8) This training program has increased my confidence to provide my HIV/AIDS patients with the most current standard of care.	○ 1	○ 2	○ 3	○ 4
9) This training program has increased my willingness to provide care to persons with HIV/AIDS.	○ 1	○ 2	○ 3	○ 4
10) I intend to utilize the training content to improve the knowledge and skills of other clinicians within my practice setting.	○ 1	○ 2	○ 3	○ 4

Please rate each presenter

RATING SCALE: 1-not at all 2-to a low degree 3-to a moderate degree 4-to a high degree 5-to a very high degree

Please rate according to the following criteria:

a. *Degree to which presenter clearly communicated the subject matter.*
b. *Degree to which presenter demonstrated knowledge of subject matter.*
c. *Degree to which presenter makes good use of examples and illustrations to clarify concepts.*
d. *Showed interest and enthusiasm for his/her teaching.*

1=Low 5=High

Presenter	Communicated subject					Demonstrated Knowledge					Examples/Illustrations					Showed interest				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Presenter 1:	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Presenter 2:	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Presenter 3:	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Presenter 4:	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Presenter 5:	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Presenter 6:	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Presenter 7:	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Presenter 8:	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Presenter 9:	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Presenter 10:	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Presenter 11:	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Presenter 12:	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

Please explain whether the program met your educational needs, what changes you feel would be helpful regarding content, and what addtional issues you would like to be covered in future programs.

18026

Indicate *five* priority topics that would be most beneficial to you for future AIDS/HIV edcational programs.

Clinical Management
1) Clinical Manifestations of HIV Disease ○
2) Diagnostic Tests and Disease Progression ○
3) Co-Morbidities ○
4) Early Interventions of HIV Disease ○
5) Treatment/NonART Medications ○
6) Antiretroviral Treatment ○
7) Adherence ○
8) Palliative Care ○
9) Basic Science and Epidemiology ○
10) Opportunistic Infections ○
11) Reproductive Health ○
12) Management of Pediatric HIV ○
13) Dental Care ○
14) Post Exposure Prophylaxis ○
15) Pain Management ○
16) Perinatal Transmission ○
17) Drug-Drug Interactions ○

Special Populations
18) Adolescent HIV ○
19) Women with HIV ○
20) Lesbian/Bisexual/WSW ○
21) Gay/Bisexual/MSM ○
22) Racial/Ethnic Minorities ○
23) Older Adults ○
24) Substance Users ○
25) Incarcerated Individuals/Parolees ○
26) Severely/Persistently Mentally Ill ○
27) Rural Populations ○

Health Care Organization and Delivery
28) Health Care Organization and Finances ○
29) Corrections HIV Care ○
30) Confidentiality ○
31) Long-Term Care ○
32) Substance Abuse Treatment ○
33) Workplace Issues ○
34) Legal Issues ○
35) International Issues ○
36) Quality Assurance/CQI ○

Prevention and Behavior Change
37) Risk Assessment ○
38) Attitude Change/Barriers to Education ○
39) Prevention Methods ○
40) Harm Reduction ○
41) Sexual History Taking ○
42) Occupational Exposure ○
43) Non-Occupational Exposure ○

Psychosocial Issues
44) Psychiatric Sequelae of HIV ○
45) Cultural Competency ○
46) Social Support Issues ○
47) Multiple Diagnoses ○
48) Substance Use/Abuse ○
49) Return to Work Issues ○
50) Sexual/Domestic Violence ○
51) Homelessness ○

Additional comments and topics you would like to add:

Appendix B: Program Record

50974

FORM HELP

Pennsylvania MidAtlantic AIDS Education and Training Center
PROGRAM RECORD

Date (mm/dd/yy) ☐☐ / ☐☐ / ☐☐

Title of the Program : _____

Coordinator/Trainer : _____

1. City of Training Site : _____

1A. Training Site Zip Code (only for In-Person Training) ☐☐☐☐☐

Was the training conducted at the provider's(participant's) site? ○ Yes ○ No

2. Topics (Check all that apply)

Clinical Management
- ○ 1. Clinical Manifestations of HIV Disease
- ○ 2. Diagnostic Tests and Disease Progression
- ○ 3. Co-Morbidities
- ○ 4. Early Interventions for HIV Disease
- ○ 5. Treatment/NonART Medications
- ○ 6. Antiretroviral Treatment
- ○ 7. Adherence
- ○ 8. Palliative Care
- ○ 9. Basic Science and Epidemiology
- ○ 10. Opportunistic Infections
- ○ 11. Reproductive Health
- ○ 12. Management of Pediatric HIV
- ○ 13. Dental Care
- ○ 14. Post Exposure Prophylaxis
- ○ 15. Pain Management
- ○ 16. Perinatal Transmission
- ○ 17. Drug-Drug Interactions
- ○ 18. Adverse Drug Reaction

Special Populations
- ○ 19. Adolescent HIV
- ○ 20. Women with HIV
- ○ 21. Lesbian/Bisexual/WSW
- ○ 22. Gay/Bisexual/MSM
- ○ 23. Racial/Ethnic Minorities
- ○ 24. Older Adults
- ○ 25. Substance Users
- ○ 26. Incarcerated Individuals/Parolees
- ○ 27. Severely/Persistently Mentally Ill
- ○ 28. Rural Populations

Health Care Organization and Delivery
- ○ 29. Health Care Organization and Finances
- ○ 30. Corrections HIV Care
- ○ 31. Confidentiality
- ○ 32. Long-Term Care
- ○ 33. Substance Abuse Treatment
- ○ 34. Workplace Issues
- ○ 35. Legal Issues
- ○ 36. International Issues
- ○ 37. Quality Assurance/CQI

Prevention and Behavior Change
- ○ 38. Risk Assessment
- ○ 39. Attitude Change/Barriers to Education
- ○ 40. Prevention Methods
- ○ 41. Harm Reduction
- ○ 42. Sexual History Taking
- ○ 43. Occupational Exposure
- ○ 44. Non-Occupational Exposure

Psychosocial Issues
- ○ 45. Psychiatric Sequelae of HIV
- ○ 46. Cultural Competency
- ○ 47. Social Support Issues
- ○ 48. Multiple Diagnoses
- ○ 49. Substance Use/Abuse
- ○ 50. Return to Work Issues
- ○ 51. Sexual/Domestic Violence
- ○ 52. Homelessness

2A. Choose Top Three Topics and Write in Numbers ☐☐ ☐☐ ☐☐

3. Collaborating Organizations (Check all that apply)
- ○ None
- ○ AIDS CBO
- ○ Area Health Education Center
- ○ Chemical Dependency Program
- ○ College or University
- ○ Community Health Center
- ○ Health Professions School
- ○ HMO/Managed Care Organization
- ○ Hospital/Hospital Based Clinic
- ○ Migrant Health Center
- ○ Regional or Local AETCs
- ○ State/Local Department of Corrections
- ○ State/Local Department of Public Welfare
- ○ State/Local Department of Drug/Alcohol
- ○ State/Local Health Department
- ○ State/Local Office of Mental Health
- ○ State/Local Professional Association
- ○ STD/Family Planning Clinics
- ○ Other (specify) _____

4. Training Modality (Check all that apply)
- ○ CD Rom/DVD/Video
- ○ Conference Call/Telephone
- ○ Conference
- ○ Email/Web-Based
- ○ Fax
- ○ Lecture/In Person
- ○ Multicomponent
- ○ Recurrent
- ○ Teleconference
- ○ Telemedicine
- ○ Train-the-Trainer
- ○ Self-Study
- ○ Workshop

5. HRSA Collaboration? (Check all that apply)
- ○ None
- ○ Title I Ryan White funded recipient
- ○ Title II Ryan White funded recipient
- ○ Title III Ryan White funded recipient
- ○ Title IV Ryan White funded recipient
- ○ Special Projects of National Significance
- ○ CDC/SAMHSA
- ○ Don't Know

Identify Special Initiatives
- ○ 1) Minority AIDS Initiative
- ○ 2) Title III
- ○ 3) Medical Service Site Expansion
- ○ 4) Core Program

6. Number of Attendees ☐☐☐☐

Number of PIFs Collected ☐☐☐☐

7. Total Hours of Training

Fill in hours of training to the nearest quarter-hour: .25=1/4 hour, .50=1/2 hour, .75=3/4 hour.

Level I- Didactic Presentation ☐☐☐.☐☐

Level II- Skills Building ☐☐☐.☐☐

Level III- Clinical Training ☐☐☐.☐☐ (hour)

Pennsylvania MidAtlantic
July 2003

13 AETC

☐☐ Subsite

☐☐☐☐☐☐☐☐ Program ID

50974

Appendix C: Clinical Consultation Form

FORM HELP 51256

Pennsylvania MidAtlantic AIDS Education and Training Center
CLINICAL CONSULTATION - Individual / Distance

Consultee Name _____

Consultant's Name _____

Date of Consultation ☐☐ / ☐☐ / ☐☐ (mm/dd/yy)

1. Patient/Client Characteristics (Code based upon presentation of consultee)

1A. Gender (Select all that apply)	1B. Age (Select all that apply)	1C. Racial/Ethnic Background (Select all that apply)	1D. Substance Use (Select all that apply)	1E. Mental Illness Diagnosis (Select all that apply)
○ Male	○ 0-10	○ African American/Black	○ Yes	○ Yes
○ Female	○ 11-20	○ American Indian/Alaska Native	○ No	○ No
○ Transgender	○ 21+	○ Asian	○ Don't Know	○ Don't Know
○ Don't Know	○ 51+	○ Caucasian		
	○ Don't Know	○ Hispanic		
		○ Native Hawaiian/Other Pacific Islander		
		○ Don't Know		

2. TOPICS of Clinical Consultation (Select all that apply)

Clinical Management of HIV Disease
- ○ 1. Clinical Manifestations
- ○ 1a. Neuropsychiatric Manifestations
- ○ 1b. Oral Manifestations
- ○ 1c. Metabolic Disorders
- ○ 1d. Identification of HIV Infection
- ○ 2. Diagnostic Tests and Disease Progression
- ○ 2a. Viral Load
- ○ 2b. CD4
- ○ 2c. Genotype/Phenotype
- ○ 2d. HIV Antibody Test
- ○ 3. Co-Morbidities
- ○ 3a. Hepatitis A, B, C
- ○ 3b. STDs
- ○ 3c. Tuberculosis
- ○ 4. Early Interventions for HIV Disease
- ○ 5. Treatment/NonART Medications
- ○ 5a. Drug-Drug Interactions
- ○ 5b. Food-Drug Interactions
- ○ 5c. Adverse Drug Reaction
- ○ 5d. Alternative Medicine
- ○ 5e. Nutrition
- ○ 6. Antiretroviral Treatment
- ○ 6a. HAART
- ○ 6b. Salvage Therapy
- ○ 6c. Resistance
- ○ 6d. Treatment Sequencing
- ○ 7. Adherence
- ○ 8. Palliative Care
- ○ 9. Basic Science and Epidemiology
- ○ 9a. Immunology/Virology
- ○ 10. Opportunistic Infections
- ○ 10a. O.I. Prophylaxis
- ○ 10b. O.I. Treatment
- ○ 10c. O.I. Diagnostic Testing
- ○ 11. Post-Exposure Prophylaxis
- ○ 11a. Occupational Exposure
- ○ 11b. Non-Occupational Exposure
- ○ 12. Reproductive Health
- ○ 13. Management of Pediatric AIDS
- ○ 14. Pain Management
- ○ 15. Perinatal Transmission

Prevention and Behavior Change
- ○ 16. Risk Assessment
- ○ 17. Harm Reduction
- ○ 18. Occupational Exposure/Infection Control

Psychosocial Issues
- ○ 19.Psychiatric Sequelae of HIV
- ○ 20. Cultural Competency
- ○ 21. Multiple Diagnoses
- ○ 22. Substance Use/Abuse
- ○ 23. Sexual/Domestic Violence
- ○ **Other Topics** _____

3. Consultee's Profession/Discipline (Select one)
- ○ Physician
- ○ Physician Assistant
- ○ Advanced Practice Nurse
- ○ Nurse Practitioner
- ○ Nurse
- ○ Dentist
- ○ Other Dental Professional
- ○ Clinical Pharmacist
- ○ Mental Health Provider
- ○ Other Health (specify) _____
- ○ Nonhealth (specify) _____

4. What is the Name of Consultee's Principal Employer? (where does he/she work?)

_____

5. Zip-code of Consultee's Employment Setting

☐☐☐☐☐ ○ Urban ○ Suburban ○ Rural

6. Consultee's Principal Employment Setting (Select one)
- ○ Hospital
- ○ Community/Migrant Health Center
- ○ Mental Health Center
- ○ Substance Abuse Treatment
- ○ Social Service Agency/CBO
- ○ STD/Family Planning Clinic
- ○ Tribal/Indian Health Service
- ○ Other Public Health Agency
- ○ HMO/Managed Care
- ○ Private Practice
- ○ Correctional Facility
- ○ Other Health Care
- ○ Nonhealth
- ○ Not Working

7. Number of Patients/Cases Discussed ☐☐☐

8. Length of Consultation

Fill in hours of training to the nearest quarter-hour. 25=1/4 hour, .50=1/2 hour, .75=3/4 hour.

☐☐.☐☐ (hour)

Office Use Only

☐☐☐☐☐☐☐☐☐☐ Unique Consultee ID

☐☐☐☐☐☐☐☐ Consultation Number

Special Initiatives
- ○ 1) Minority AIDS Initiative
- ○ 2) Title III
- ○ 3) Medical Service Site Expansion
- ○ 4) Core Program

Method of Consultation (Select all that apply)
- ○ Email
- ○ Fax
- ○ Telephone
- ○ Telemedicine
- ○ Visit to Provider's Practice/In-Person

13 AETC ☐☐ Subsite

RWCA: Yes ○ No ○ DK ○

51256

Pennsylvania MidAtlantic AETC/January 2003

Appendix D: Technical Assistance Form

53157

Pennsylvania MidAtlantic AIDS Education and Training Center
AGENCY TECHNICAL ASSISTANCE FORM

FORM HELP

TA Agency Name _____

TA Contact Name _____

Date of TA ☐☐ / ☐☐ / ☐☐ (mm / dd / yy)

1. Type of Agency (Select one)

- ○ Community Based Organization
- ○ Community/Migrant Health Center
- ○ Tribal/Indian Health Service
- ○ Public Health Clinic
- ○ MCH/Family Planning
- ○ STD Clinic
- ○ Health Care for the Homeless
- ○ Social Service Agency
- ○ State and Local Public Health Agencies
- ○ HMO/Managed Care
- ○ Academic Health Center
- ○ Hospital - Inpatient
- ○ Hospital - Outpatient
- ○ Home Health/Visiting
- ○ Long-Term Care
- ○ Substance Abuse Treatment
- ○ Non-Hospital Mental Health
- ○ Private Practice
- ○ Corrections Facility
- ○ International Agencies
- ○ Military/VA
- ○ Ryan White Planning Council/Consortium
- ○ Other Health Care (specify)_____
- ○ Nonhealth (specify)_____

1A. Assistance Directly Provided to: (Select all that apply)

- ○ Program Clinical Staff
- ○ Program Administration/Management Staff
- ○ Program Evaluation/CQI Staff
- ○ Program Social Service Staff
- ○ Other Support Staff
- ○ Community Advisory Board
- ○ Agency Board
- ○ Education Staff
- ○ Other (specify)_____

2. TOPICS of Technical Assistance (Select all that apply)

Organizational Development
- ○ Resource Allocation
- ○ Staff Recruitment
- ○ Staff Supervision
- ○ Grant Management
- ○ Grant Development
- ○ Community Linkages
- ○ Marketing Strategies
- ○ Organizational Finances
- ○ Agency Needs Assessment

Technology
- ○ Clinical Database
- ○ Internet Access
- ○ Website Development
- ○ Electronic Medical Records
- ○ Data Reporting

Workplace Issues
- ○ Diversity/Cultural Competency
- ○ Confidentiality
- ○ Policy Development
- ○ Americans with Disabilities Act
- ○ Performance Management
- ○ Staff Burnout

Educational Programming
- ○ Design
- ○ Marketing
- ○ Evaluation
- ○ Curriculum Development

Clinical Programming
- ○ Client Scheduling
- ○ Acuity Levels
- ○ Continuity of Care
- ○ Continuous Quality Improvement (CQI)
- ○ Clinical Service Coordination
- ○ Clinical Service Evaluation
- ○ **Other Topics**_____

3. Direct TA Recipients' Profession/Discipline (Select all that apply)

- ○ Physician
- ○ Physician Assistant
- ○ Advanced Practice Nurse
- ○ Nurse Practitioner
- ○ Nurse
- ○ Dentist
- ○ Other Dental Professional
- ○ Clinical Pharmacist
- ○ Mental Health Provider
- ○ Administrator
- ○ Other Health (specify) _____
- ○ Nonhealth (specify) _____

4. Location and Zip-code of Agency/Program/Clinician Provided with TA

○ Urban ○ Suburban ○ Rural ☐☐☐☐☐

5. Method of Communication (Select all that apply)

- ○ Email
- ○ Fax
- ○ Recurrent
- ○ Telephone/Teleconference
- ○ Telemedicine
- ○ Visit to Provider's Practice/In-Person
- ○ Postal Mail

6. Materials Provided (Select all that apply)

- ○ Articles
- ○ Brochures / Pamphlets
- ○ Curriculum
- ○ Directories/Service Provider Lists
- ○ Guidelines
- ○ Instruments/Tools
- ○ Link to Clinical Consultation
- ○ Link to Online Resources
- ○ Literature
- ○ Recommendations to purchase materials
- ○ Technical Manual
- ○ Training Schedule
- ○ Other_____

7. Length of Technical Assistance

Fill in hours of training to the nearest quarter-hour. .25=1/4 hour, .50=1/2 hour, .75=3/4 hour. This is the entire time spent on the Technical Assistance.

(hr.min) ☐☐☐.☐☐

8. Source of Technical Assistance Requested

- ○ AETC Initiated
- ○ Agency Initiated

9. RWCA Funded

Yes	No	Don't Know
○	○	○

For Office Use Only

Technical Assistance Number ☐☐☐☐☐☐☐☐

Unique TA Recipient ID ☐☐☐☐☐☐☐☐☐☐

AETC 13

Subsite ☐☐

Special Initiatives
- ○ 1) Minority AIDS Initiative
- ○ 2) Title III
- ○ 3) Medical Service Site E
- ○ 4) Core Program

53157

Pennsylvania MidAtlantic AETC/July 2003

Appendix E: Attendance, Forms Submitted and Unduplicated Count of Participants (2002-2003 grant cycle)

Method for extrapolating unduplicated count:

$EXUND\_ID_i$ =Extrapolated unduplicated count of participants in Level i

UND_ID_i = Number of unduplicated IDs for level i

$PIF\_NO\_IDS_i$ = Number of participant information forms (PIFs) without ID's for Level i submitted by AETC

PIF_IDS_i = number of PIFs with ID's for Level i submitted by AETC

$$EXUND = \sum EXUND\_ID_i$$

EXUND = The extrapolated unduplicated count of participants across all levels(1,2,3)

This formula assumes that the mean number of AETC training events for participants who do not provide an ID is the same for those providing IDs within a training level.

Table A.1 - Attendance, PIFs Submitted and Unduplicated Count of Participants

	Level 1	Level 2	Level 3	Total
Total PIFs Submitted	4,031	8,978	630	13,639
PIFs with Participant ID N	3,636	7,954	587	12,17
% of PIFs Submitted with ID	90	89	93	89
Unique Identifiers N	3,216	6,070	572	9,858
(Mean number of encounters per unique participant ID)	1.13	1.31	1.03	1.24
Extrapolated Unduplicated Count of Participants N	3,565	6,851	613	11,029

Appendix F: Attendance, Forms Submitted and Unduplicated Count of Participants (2003-2004 grant cycle)

Method for extrapolating unduplicated count:

$EXUND\_ID_i$ =Extrapolated unduplicated count of participants in Level i

UND_ID_i = Number of unduplicated IDs for level i

$PIF\_NO\_IDS_i$ = Number of participant information forms (PIFs) without ID's for Level i submitted by AETC

PIF_IDS_i = number of PIFs with ID's for Level i submitted by AETC

$$EXUND = \sum EXUND\_ID_i$$

EXUND = The extrapolated unduplicated count of participants across all levels (1,2,3)

This formula assumes that the mean number of AETC training events for participants who do not provide an ID is the same for those providing IDs within a training level.

Table A.1 - Attendance, PIFs Submitted and Unduplicated Count of Participants

	Level 1	Level 2	Level 3	Total
Total PIFs Submitted	4,068	9,774	254	13,842
PIFs with Participant ID N	3,500	8,675	128	12,303
% of PIFs Submitted with ID	86	89	50	89
Unique Identifiers N	3,071	6,007	125	9,203
(Mean number of encounters per unique participant ID)	1.14	1.44	1.02	1.34
Extrapolated Unduplicated Count of Participants N	3,571	6,765	248	10,584

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