HIV TRAINING NEEDS REPORT FOR ILLINOIS

Midwest AIDS Training + Education Center,
University of Illinois at Chicago

Fall 2018

Introduction

This report provides the results of the needs assessment for the state of Illinois. The needs assessment workgroup conducted a series of activities between January and September of 2018. These activities involved data collection from primary and secondary data sources, data analysis, and reporting of regional as well as local (state-level) results.

The needs assessment results in this report are organized by workforce category (i.e. clinical versus non-clinical providers, low volume/novice providers, minority & minority-serving providers) as well as by topics that deserve special attention (i.e. PrEP, Hepatitis C, and the opioid epidemic). The clinics that each LP selected as potential candidates for Practice Transformation are shown at the end of the report.

Data sources used for the needs assessment include the following:

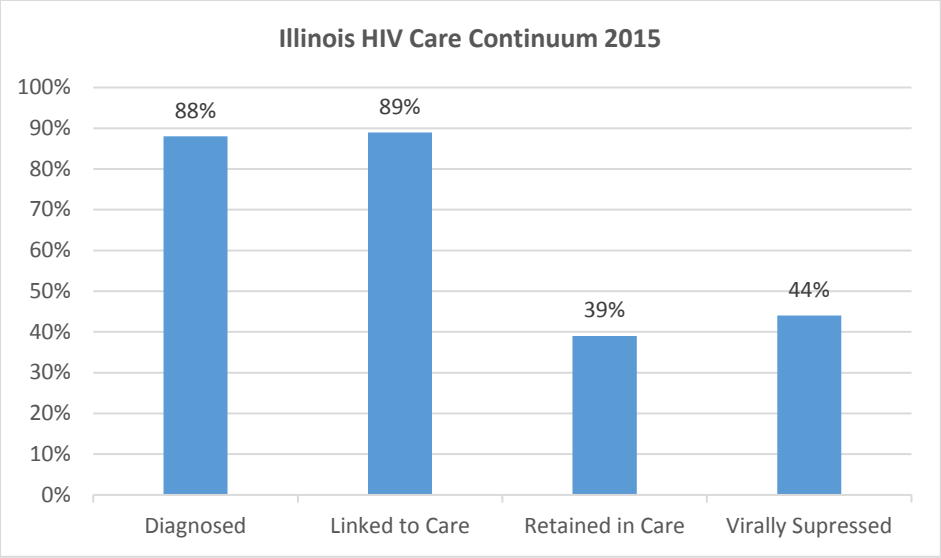
Primary Data Sources	Secondary Data Sources
• Policy Training Advisory Council (PTAC) • Key Informant Interviews with clinical leaders of each state • AETC Local Partner Program Directors	• HIV Integrated Prevention and Care Plans • HIV Surveillance reports from state health departments and CDC • AETC PIF, ER, and ACRE IP data from FY17-18 • CDC_Atlas Plus interactive database • amfAR Opioid and Health Indicators database • HRSA Data Warehouse • The Robert Graham Center workforce projections

Epidemiology

Illinois is considered a high incidence state in the Midwest AETC region and accounts for a disproportionate amount of HIV prevalence and incidence. The state is home to 19% of the population of the Midwest region, but accounts for 31% of the HIV prevalence in 2015 and 28% of new HIV diagnoses in 2016 (Appendix, table 1). Table 2 in the Appendix shows that several subpopulations are disproportionally affected by HIV in Illinois, as illustrated by the high HIV prevalence rate among African Americans (1101.9 per 100,000) and people who identify as multi-racial (1527.8).

Care Continuum

The HIV Care Continuum for Illinois shows that the state performed worse compared to the United States in 2015 in the percentages of PLWH retained in care (IL 39% vs. USA 48%) and virally suppressed (IL 44% vs. USA 49%). Black men have the lowest rates of retention (36%) and viral suppression (40%) compared to other racial subpopulations in Illinois. In the Care Continuum chart on the next page, the percentage of people diagnosed is based on the total estimate of HIV-infected individuals, of whom an estimated 12% are undiagnosed. All other percentages are based on the total number of diagnosed PWLH.



The State of the HIV Workforce in Illinois

Reviewing the Integrated Plan for HIV Prevention and Care and summarizing data obtained from key informant interviews and members of PTAC revealed the following information about the state of the HIV workforce in Illinois:

- There is a shortage of HIV providers as well as primary care providers, resulting from providers who are retiring, providers who leave HIV to work for the pharmaceutical industry, and providers who are not interested in HIV because they believe it is too complicated or not lucrative enough.
- The provider shortage is exacerbated by the increasing number of PLWH and their expanding needs as they age.
- Openings for clinicians at HIV clinics are very hard to fill, particularly on the south side of Chicago.
- In order to expand the workforce, we need to teach students about HIV care and prevention while they are still in school and before they decide on a career choice. This includes targeting residents in family and internal medicine with training in HIV care and prevention

Training Needs of Low Volume and Novice HIV Providers

The training needs of low volume and novice providers who attended training events in Illinois during FY2017-2018 were assessed by analyzing their responses to the needs assessment question on the ACRE-IP form. Figure 2 in the Appendix shows the results of this analysis. Low volume and novice providers indicated that they would like more training on mental health, transgender health, African American patients, Hepatitis C co-infection, and opportunistic infections. The discipline breakdown of the respondents helps clarify which professional disciplines were more likely to suggest each one of these training topics.

Training Needs of Minority/Minority-Serving HIV Providers

The training needs of minority and minority-serving providers who attended training events in Illinois during FY2017-2018 were assessed by analyzing their responses to the needs assessment question on the ACRE-IP form. Figure 3 in the Appendix shows the results of this analysis. Minority and minority-serving providers in Illinois indicated that they would like more training on mental health, transgender health, substance use, African American patients, and Hepatitis C co-infection. The discipline breakdown of the respondents helps clarify which professional disciplines were more likely to suggest each one of these training topics.

Training Needs of the Clinical Workforce

The clinical HIV workforce includes physicians, nurse practitioners, pharmacists, physician assistants, and dentists. The following needs apply to the clinical workforce only. Needs that apply to both clinical and non-clinical providers are listed in a separate paragraph.

- Primary care providers are a major focus throughout the entire state but specifically in the more rural areas. They need training in HIV screening, testing, diagnosing, how to treat HIV in their practices, and how to integrate prevention into care.
- There is a need for more dental care providers for HIV patients
- Geriatrics and caring for an aging HIV population are important topics
- Training should focus on provider's treatment context in their care area, with knowledge about regional specialists they can access
- Focus training on PA's and NP's. They are part of the answer to solving the shortage problem
- We need to direct our trainings towards professional identity formation and interprofessional care. Both have a positive effect on retaining providers in the HIV workforce
- Engage distance-based learning technologies such as Telehealth to train rural providers
- Mentoring and hands-on repeated clinical observation are important for new providers. Learning on the job is very important and more effective than didactic training

Training Needs of the Non-Clinical Workforce

The non-clinical HIV workforce includes nurses (RN), mental health professionals, substance abuse professionals, social workers, and case managers. The following needs apply specifically to the non-clinical workforce:

- Focus on retention strategies for black men by addressing mental health, substance abuse, housing, and transportation
- There are gaps in available support services outside of Chicago
- Include non-clinical workforce in prevention training as they see people who are HIV-negative but at high risk
- Training in PrEP adherence – this is an important aspect of the role of allied health professionals in prevention efforts as many patients stop taking PrEP after having been on it for a few months.
- Focus on pregnant women with HIV as they often lack prenatal care due to mental health or substance abuse issues.

Training Needs of All HIV Providers (Clinical and Non-Clinical)

The following training needs apply to both the clinical as well as non-clinical HIV workforce in Illinois:

- Providers need to understand the epidemiology of the geographic area they are serving and the populations they are dealing with
- Risk identification, prevention, stigma, and case identification are huge training needs in working with HIV-negative partners of PLWH
- Trauma-informed care is important for all providers
- Cultural competency, stigma, and discrimination, particularly toward the LGBTQ and IDU populations, are topics that all providers need to understand
- Unwillingness on the part of providers to accept Medicaid affects prevention, care, and support services across the board
- Re-entry training in prisons and jails is important as their populations carry a disproportionate burden of HIV
- To prevent burnout among existing providers, emotional support between providers is a real need. Mentoring, training, orientation of new providers all play a role in this. The Clinician Scholars Program gets this.

Training Needs around Prevention and PrEP

We asked key informants and members of PTAC specific questions about the needs in their state around PrEP and prevention. Based on the information they shared with us, we identified the following needs in Illinois:

- Train primary care providers, particularly those who treat young African-American MSM, in prevention including risk identification, PrEP, and other prevention strategies.
- Train clinical providers in treatment as prevention and same day start
- Engage new technologies (internet, social media) to train rural providers in prevention
- Continue and expand what MATEC IL is doing with PrEP training, branching out to pediatricians, primary care clinicians, OB/GYN doctors, and emergency room doctors. Train providers in how easily accessible PrEP is, how to keep pressure on payers, and how to keep an eye on new effective PrEP drugs that will be coming out
- Develop best practices for PrEP implementation (provider education, patient education, promotional materials) based on clinics who have successfully incorporated PrEP

Training Needs around African Americans

African Americans are disproportionally affected by HIV, as evidenced by higher diagnoses and prevalence rates and lower linkage to care, retention, and viral suppression rates compared to other racial and ethnic populations. Illinois' situation is particularly dire, with the rate of new HIV infections among African American men being ten times the rate of new infections among white men in 2017. The racial disparity is even greater among women. The risk of being diagnosed with HIV was more than 13 times higher among African American women in Illinois compared to white women in 2017. HIV incidence data from the City of Chicago show similar gaps between incidence rates of different racial and ethnic groups, with African American women being 20 times more likely to be diagnosed with HIV than white women and 8 times more likely to be diagnosed with HIV than Hispanic women.

Training in Illinois should focus on reducing new HIV diagnoses among African American men and women, which should include targeted prevention efforts through the provision of PrEP and Treatment as Prevention. At the same time, training efforts concentrated on increasing access to and quality of HIV care are needed so that those newly diagnosed with HIV can be linked to care, retained in care, and achieve viral suppression.

Table 1: HIV Prevalence by Race/Ethnicity and Gender, Illinois excl. Chicago, as of 12/31/2017

Race/ Ethnicity	Male		Female	
	Cases	Rate per 100,000	Cases	Rate per 100,000
NH Black	6247	727.7	2593	265.8
Hispanic	2711	250	515	50.7
Other	894	223.6	189	44.4
NH White	5029	126.5	585	14.1

Source: Illinois Department of Public Health, HIV/AIDS Surveillance Unit

Table 2: HIV Incidence by Race/Ethnicity and Gender, Illinois excl. Chicago, 2017

Race/ Ethnicity	Male		Female	
	Cases	Rate per 100,000	Cases	Rate per 100,000
NH Black	217	45.1	47	9.4
NH White	154	4.4	24	0.7
Hispanic	106	16	8	1.2
Other	26	7.7	5	1.4

Table 3: HIV Incidence by Race/Ethnicity and Gender, Chicago, 2017

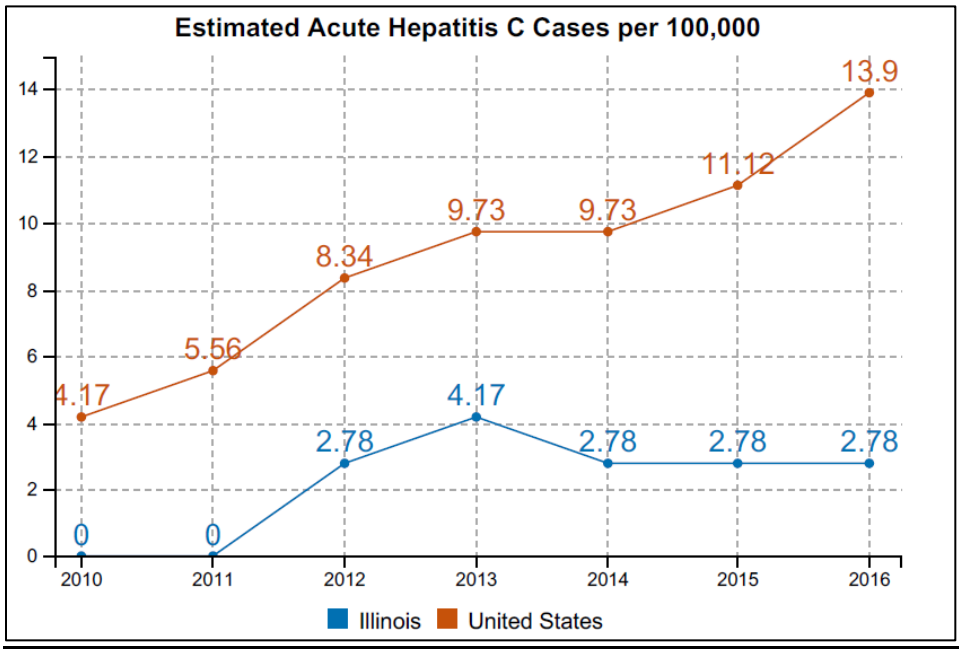
Race/ Ethnicity	Male		Female	
	Cases	Rate per 100,000	Cases	Rate per 100,000
NH Black	375	92.0	112	26.5
NH White	126	29.2	6	1.3
Hispanic	163	42.0	19	4.7
Other	37	34.9	8	7.3

Hepatitis C

In the United States, 25% of PLWH are co-infected with Hepatitis C (HCV). About 80% of PLWH who inject drugs also have HCV. HIV/HCV co-infection more than triples the risk for liver disease, liver failure, and liver-related death. Liver disease, most of it related to HCV and HBV, has become the leading cause of non-AIDS-related deaths among the HIV population. African Americans are twice as likely to have HCV as whites.[1]

Compared to the national numbers, acute HCV infection is a smaller problem in Illinois as in some of the other Midwestern states based on the estimated acute HCV cases per 100,000. However, the number of chronic HCV cases increased by 43 percent from 6,887 in 2006 to 9,838 in 2017. Many of the cases in individuals younger than 35 years of age have been linked to injection drug use. The rise in hepatitis C cases corresponds with the opioid epidemic in Illinois.[2]

[1] https://www.cdc.gov/hiv/pdf/library_factsheets_HIV_and_viral_Hepatitis.pdf
[2] http://www.dph.illinois.gov/news/hepatitis-cases-are-increasing

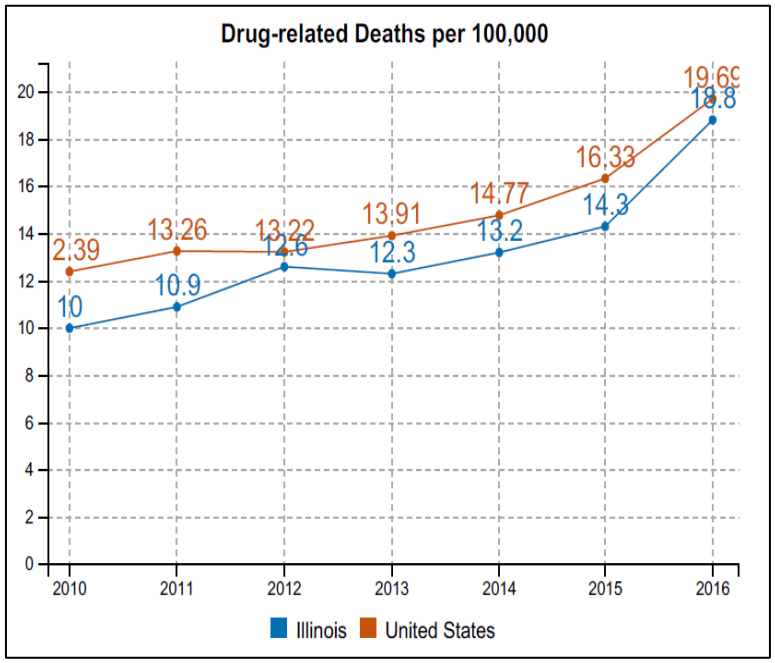


Source: http://opioid.amfar.org

Opioid Epidemic

Many of the Midwestern states have seen a sharp rise in the number of opioid-related overdose deaths since 2013. As the number of injection drug users continues to rise, the risk increases for the spread of infectious diseases such as HIV and HCV as a result of needle sharing. Several states in the country, including some in the Midwest, are seeing an increase in new HIV infections among white injection drug users.

In 2016, Illinois reported 18.8 drug-related deaths per 100,000 compared to the national average of 19.69. Illinois has 9 syringe exchange programs and 178 facilities that provide medication assisted treatment.



Source: http://opioid.amfar.org

Rural Counties at High Risk for HIV and HCV Outbreaks

The CDC has identified 220 counties at risk of HIV and/or HCV outbreaks as a result of the opioid epidemic. Illinois is home to only 1 vulnerable county, Hardin, which is located in the southeastern part of the state. However, as the state is home to many rural counties, particularly in the southern part, it is important that providers in these areas know how to screen and test for HIV and HCV in people who inject drugs and know their resources for connecting people to care. ***The Triple Threat training that is happening in the Chicago EMA could be expanded to the rural counties.***

CDC Vulnerable Counties

Source: http://opioid.amfar.org

Potential Practice Transformation Clinics

We asked our LP's to identify clinics in their state that could be potential candidates for Practice Transformation during the next grant cycle. While identifying these clinics, we asked the LP's to select clinics that would meet the strict criteria from the 2015 AETC guidance (existing criteria) as well as clinics that did not meet the existing criteria but would be excellent candidates if the criteria are loosened during the next grant cycle. Illinois identified the following clinics as potential candidates for Practice Transformation:

Potential clinics that meet existing PT criteria	Potential clinics that do not meet existing PT criteria
1. Friend Family Health Center in Chicago 2. Alivio Medical Center, Chicago	1. Chestnut Health Systems, Bloomington 2. Southern 7 Health Department, Ullin

"This project was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number U1OHA29293 (AIDS Education and Training Centers). This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government."

APPENDIX

Table 1: HIV Incidence and Prevalence for 10 states in Midwest AETC Region, 2016						
	Population as of 12/31/2015		HIV Prevalence as of 12/31/2015		HIV Incidence in 2016	
State	Total population in numbers	Total Population as % of Midwest Region	HIV prevalence in numbers as of 12/31/15	HIV prevalence as % of Midwest Region as of 12/31/15	HIV incidence in numbers in 2016	HIV incidence as % of Midwest Region in 2016
IL	12,835,726	19%	35,441	31%	1,391	28%
IN	6,634,007	10%	10,741	9%	484	10%
IA	3,130,869	5%	2,427	2%	137	3%
KS	2,907,731	4%	2,830	2%	142	3%
MI	9,933,445	15%	14,615	13%	748	15%
MN	5,525,050	8%	7,803	7%	289	6%
MO	6,091,176	9%	11,887	10%	518	10%
NE	1,907,603	3%	2,040	2%	76	2%
OH	11,622,554	18%	20,709	18%	973	20%
WI	5,772,917	9%	5,916	5%	224	4%
Midwest	66,361,078	100%	114,409	100%	4,982	100%

Source: https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2016-vol-28.pdf

Table 2: People Living with HIV by State, Compared by Racial Population Percentages, as of 12/31/2015									
State	Total population in millions in 2015	White		AA, Black		Latino		Multiple Races	
		Number of People Living with HIV	Rate per 100,000	Number of People Living with HIV	Rate per 100,000	Number of People Living with HIV	Rate per 100,000	Number of People Living with HIV	Rate per 100,000
IA	3.12	1565	68.2	458	574	224	180.6	118	423.9
IL	12.86	9963	144.6	16508	1101.9	6629	405.7	1849	1527.8
IN	6.61	5410	120.5	3817	780.6	960	306.6	380	564.2
KS	2.91	1441	76.6	704	519.5	487	205.8	152	346.3
MI	9.92	4869	75.3	8294	736.4	811	230.6	500	378.2
MN	5.48	3812	100.3	2710	1141.7	778	392.4	248	362.3
MO	6.07	5615	135.7	5202	913.8	636	361.9	341	456.6
NE	1.89	1059	82.8	569	836.7	306	223.7	51	269.8
OH	11.61	9357	118.0	9072	783.1	1255	422.0	801	584.1
WI	5.76	2648	64.9	2177	772	817	304.6	163	305.4
US	321.22	298,373	174.2	404,375	1238.3	213,428	496.8	37810	890.0

Source: https://gis.cdc.gov/grasp/nchhstpatlas/tables.html

Table 3: Number of HIV Diagnoses by State, Absolute Numbers and Rates per 100,000, (2016)								
State	White		AA, Black		Latino		Multiple Races	
	Number of HIV diagnosis	Rate per 100000	Number of HIV diagnosis	Rate per 100000	Number with HIV diagnosis	Rate per 100000	Number with HIV diagnosis	Rate per 100000
IA	72	3.1	43	51.9	10	7.8	4	13.7
IL	284	4.2	741	49.6	291	17.5	28	22.4
IN	190	4.2	217	43.9	55	17.0	7	10
KS	77	4.1	32	23.6	23	9.5	5	11
MI	234	3.6	430	38.2	46	12.7	19	13.9
MN	116	3.0	129	52.3	23	11.1	6	8.4
MO	207	5.0	248	43.3	40	22.0	11	14.2
NE	38	3.0	15	21.7	16	11.3	2	10.1
OH	380	4.8	499	42.8	52	16.9	29	20.4
WI	78	1.9	109	38.4	24	8.7	8	14.4
US	10329	6.0	17450	52.9	9750	22.2	871	19.8

Source: https://gis.cdc.gov/grasp/nchhstpatlas/tables.html

Table 4: HIV/AIDS Prevalence, Number of Ryan White Providers, Number of Community Health Centers (CHCs) providing HIV Care, and Number of Unique Facilities/Providers reporting CD4 and Viral Load in 10 Midwestern States (2015)				
State	# of PLWHA as of December 31, 2015[3]	# of Ryan White providers as of December 31, 2015[4]	# of CHCs providing clinical HIV care as of December 31, 2015[2]	# of unique facilities or providers reporting CD4 and viral load in 2015[5]
Illinois	35,441	121	37	318 facilities
Indiana	10,741	21	20	N/A
Iowa	2,427	10	11	80 facilities
Kansas	2,830	11	13	88 facilities
Michigan	14,615	36	33	N/A
Minnesota	7,803	20	15	85 facilities
Missouri	11,887	27	19	352 providers
Nebraska	2,040	17	6	121 providers
Ohio	20,709	38	36	267 providers
Wisconsin	5,916	22	13	581 providers
Total 10 states	114,409	323	203	571 facilities 1,321 providers

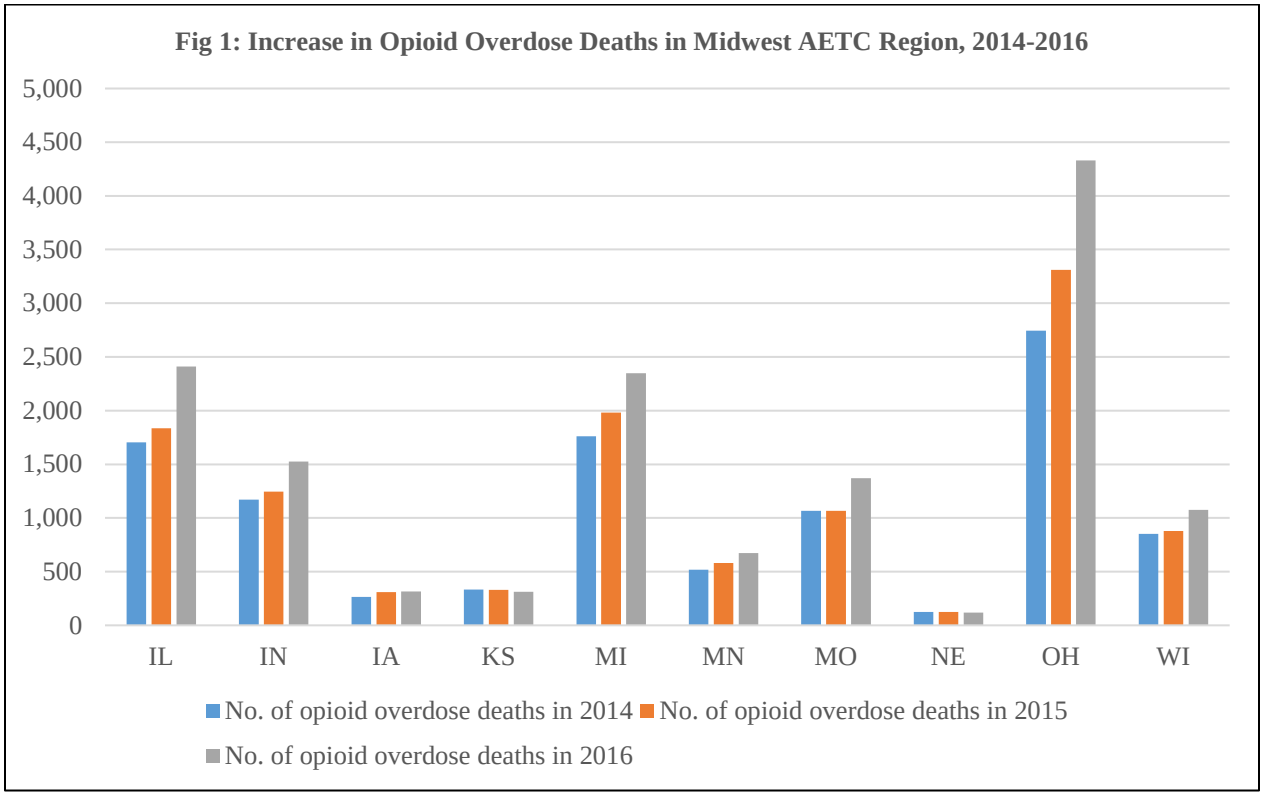
[3] Centers for Disease Control and Prevention, HIV Surveillance Report, Volume 28. Diagnoses of HIV Infection in the United States and Dependent Areas, 2016. https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2016-vol-28.pdf

[4] Health Resources and Services Administration, Data Warehouse. Accessed 4/9/2018. https://datawarehouse.hrsa.gov

[5] Data provided by State Health Departments upon MATEC's request.

Table 5: Drug-related deaths, HCV incidence, HIV incidence, and HIV prevalence rates in 10 Midwestern States and the United states, 2015-2016				
States	Drug-related deaths per 100,000 in 2016	Acute HCV cases per 100,000 in 2015	New HIV diagnoses per 100,000 in 2016	HIV prevalence per 100,000 as of 2015
IA	10.0	N/A	5.1	93.5
IL	18.8	2.8	12.9	330.1
IN	23.0	30.6	8.8	195.7
KS	10.8	7.0	5.9	118.6
MI	23.6	15.3	8.9	174.6
MN	12.2	12.5	6.2	171.3
MO	22.5	5.6	10.0	234.0
NE	6.3	1.4	4.9	131.6
OH	37.3	22.2	9.9	212.5
WI	18.6	25.0	4.6	122.0
US	19.7	13.9	14.7	362.3

Source: http://opioid.amfar.org



Source: https://www.cdc.gov/drugoverdose/data/statedeaths.htm

Table 6: Syringe Exchange Programs and Facilities Providing Some Medication Assisted Treatment (MAT) in 10 Midwestern States in 2018		
States	Syringe Exchange Programs in 2018	Facilities providing MAT (2018)
IA	1	29
IL	9	178
IN	7	108
KS	0	42
MI	4	121
MN	10	89
MO	2	107
NE	0	19
OH	7	215
WI	15	101

Source: http://opioid.amfar.org

Table 7: Additional PCPs needed in 10 Midwestern States by 2030			
State	Additional PCPs required by 2030	% increase compared to state's current PCP workforce	Current population to PCP ratio
Illinois	1,063	12%	1462:1
Indiana	817	20%	1659:1
Iowa	119	5%	1507:1
Kansas	247	13%	1561:1
Michigan	862	12%	1400:1
Minnesota	1,187	28%	1258:1
Missouri	687	18%	1564:1
Nebraska	133	11%	1489:1
Ohio	681	8%	1482:1
Wisconsin	942	22%	1364:1

https://www.graham-center.org/rgc/publications-reports/browse-by-topic/workforce.html

Table 8: Number of Health Professional Shortage Areas (HPSAs), Medically Underserved Areas (MUAs), and Medically Underserved Populations (MUPs) in 10 Midwestern States, HHS Regions V and VII, and the United States in 2018

Region/ State	Population Estimate as of 1/7/2017[1]	Number of HPSAs for Primary Care (as of 4/4/2018)	Number of MUAs (as of 4/4/2018)	Number of MUPs (as of 4/4/2018)
United States	325.7 million	7,176	3586	426
HHS V and VII	66.6 million	1,831	935	96
Illinois	12.8 million	234	147	17
Indiana	6.7 million	159	45	22
Iowa	3.1 million	132	87	1
Kansas	2.9 million	169	90	14
Michigan	10.0 million	361	89	11
Minnesota	5.6 million	128	97	10
Missouri	6.1 million	250	115	5
Nebraska	1.9 million	111	81	1
Ohio	11.7 million	150	114	13
Wisconsin	5.8 million	137	70	4

[1] United States Census Bureau, Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2017. https://www.census.gov/data/tables/2017/demo/popest/state-total.html

Fig 2: Training Needs of Low Volume and Novice Providers in Illinois during FY 2017-18

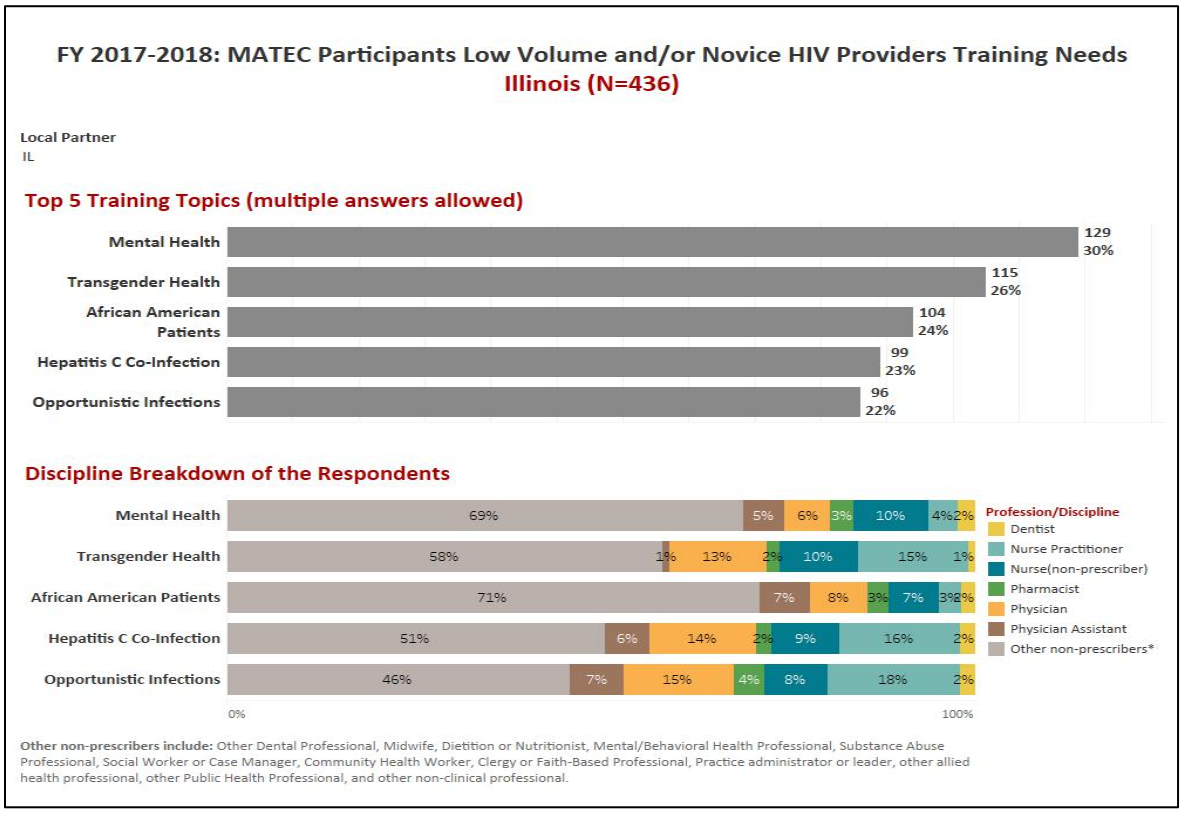


Fig 3: Training Needs of Minority and/or Minority Serving Providers in Illinois during FY 2017-18

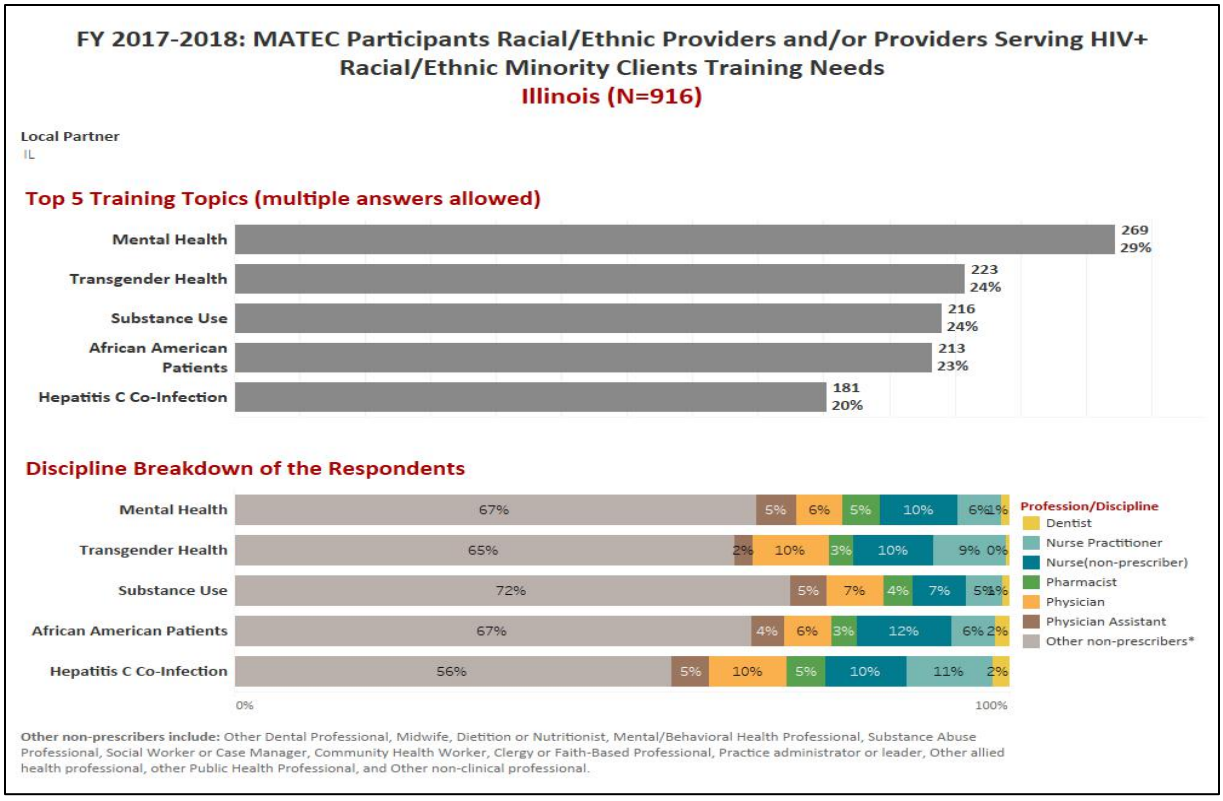


Fig 4: CORE and MAI Participants by Discipline in Illinois and Midwest Region during FY 2017-18

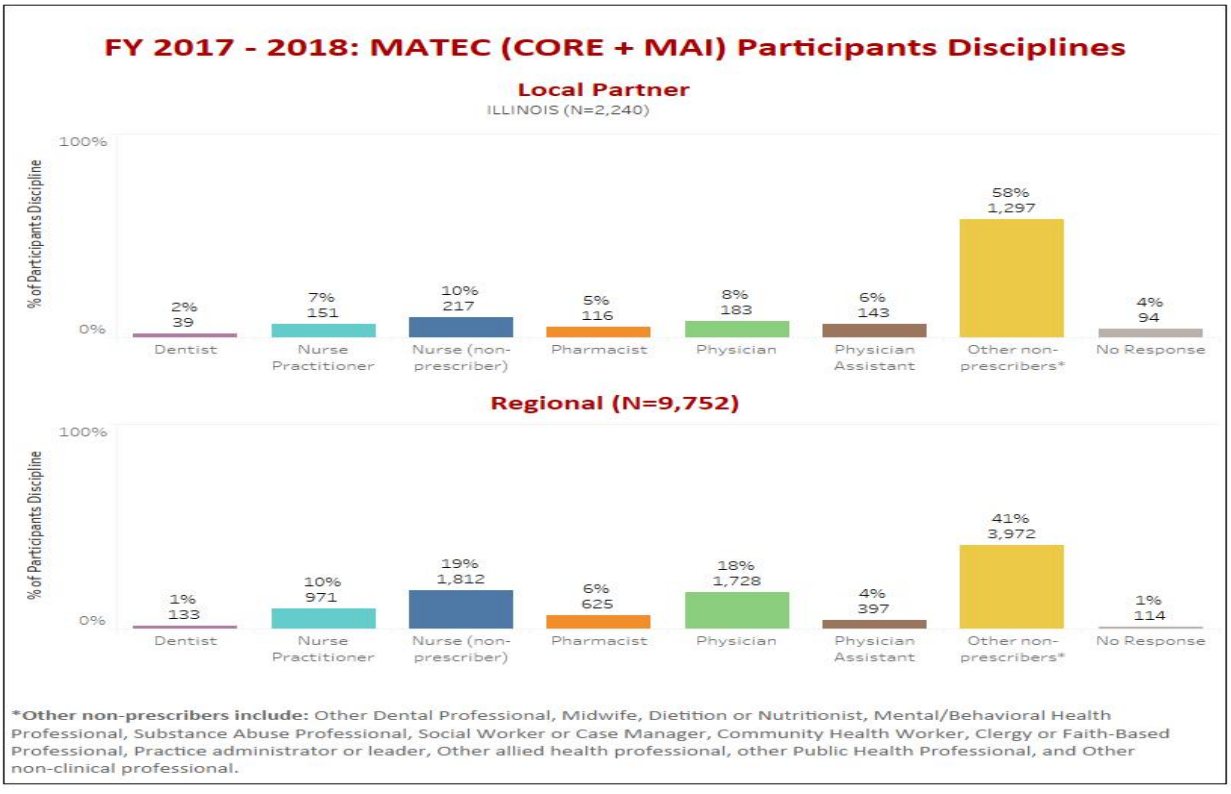


Fig 5: CORE and MAI Participants by Race and Ethnicity in Illinois and Midwest Region during FY 2017-18

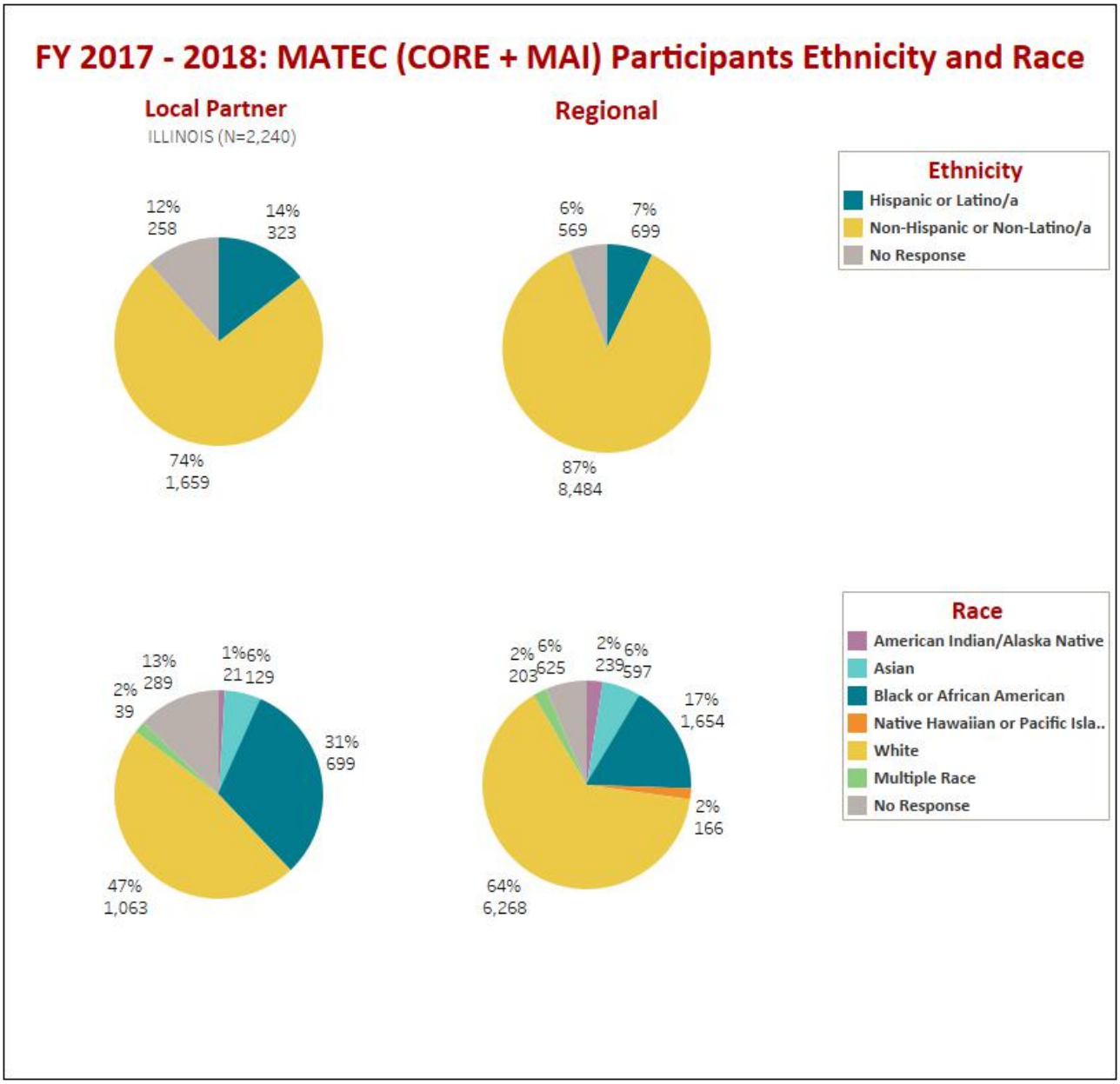


Fig 6: Map of Employment Zipcodes of MATEC Trainees Who Work in Illinois